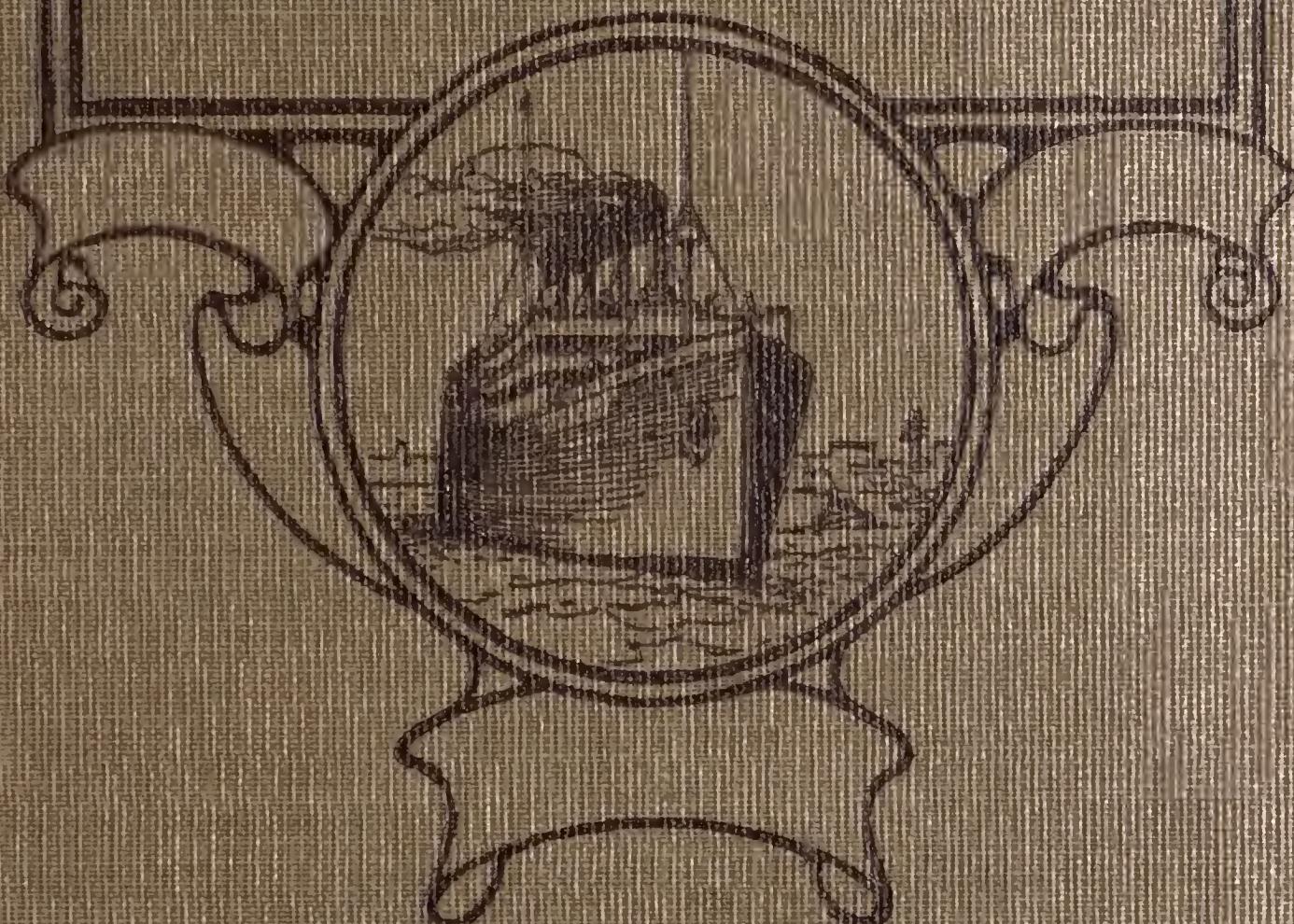


RABENORT'S GEOGRAPHY

WILLIAM RABENORT



EUROPE

REVISED EDITION

AMERICAN BOOK COMPANY



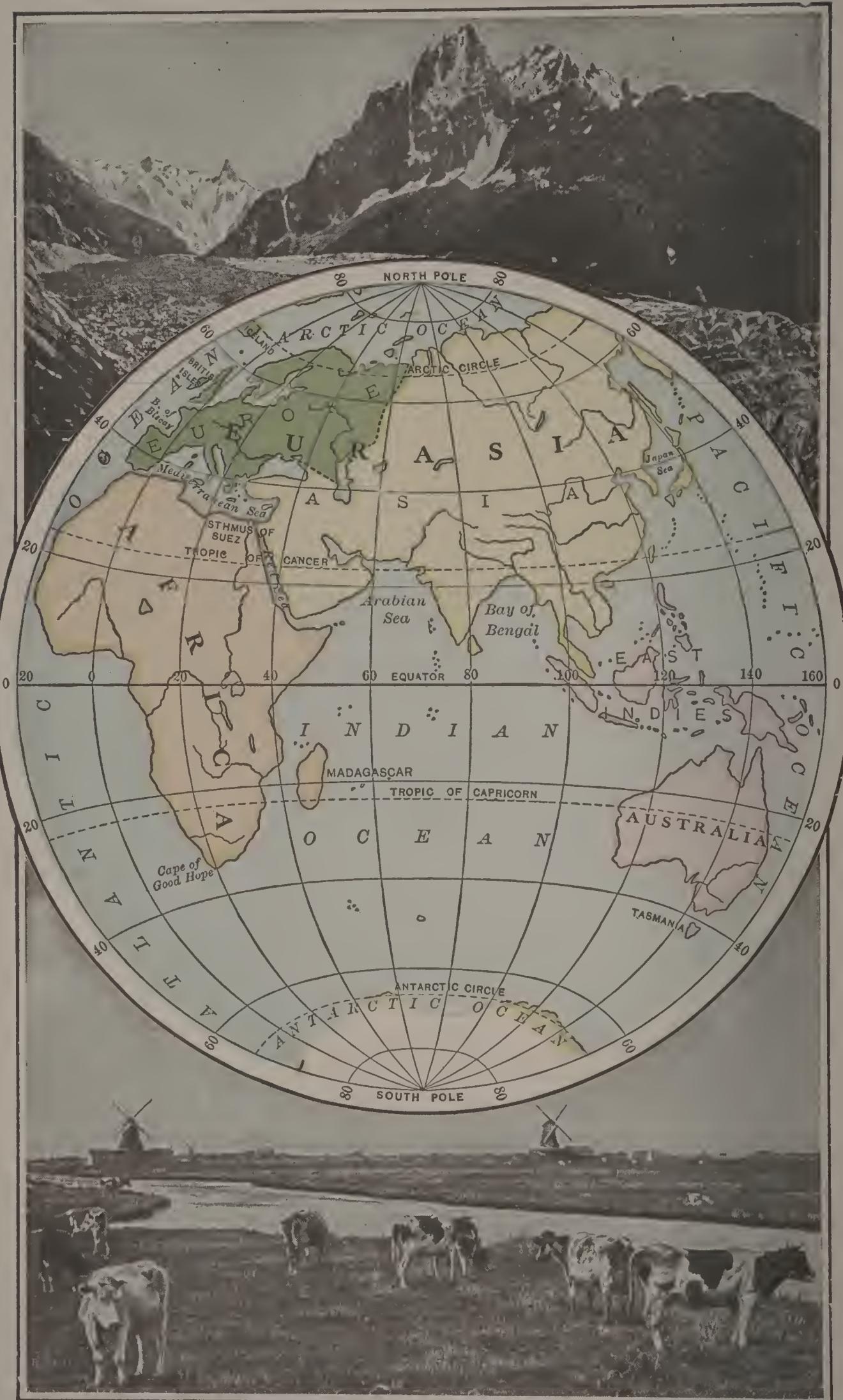
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Scene in the Highlands. Alpine peaks and glacier.



View in the Lowlands, Holland.

RABENORT'S GEOGRAPHY

EUROPE

BY

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PRINCIPAL OF PUBLIC SCHOOL 55, THE BRONX
THE CITY OF NEW YORK



REVISED EDITION

AMERICAN BOOK COMPANY

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Preface

This book is written with the hope that it may give the girls and boys who read it a permanent liking for the study of the world in which they live. A great geographer called the earth "the home of man," and his characterization is taken as the fundamental concept for this geography.

Inanimate nature as well as the flora and fauna of the earth have strong influences upon the life and customs of the human race, and are therefore of high interest to those who would understand themselves and their fellow men. These influences are varied. Every country cherishes the places associated with its history, literature, and art; beautiful and majestic scenery attracts travelers to the most remote regions; natural forces impose conditions upon man which affect his welfare and to which he must adjust himself. But, however potent these aspects of the earth may be, there is probably nothing in the world of greater interest than the people who inhabit it. A knowledge of their habits and customs, their homes and other buildings, their occupations, and their dealings with people of other lands is needed by the boy or girl who would understand and enjoy the newspaper or magazine, the story book, biography, history, or volume of travel; the sermon, speech, or lecture.

The ability to locate the scene of an event, past or current, is basic to general culture. It implies the ability to read a map, and its development is greatly aided by practice in rapidly sketching the chief features of a coun-

try or grand division. Graphic representation only of location or other physiographical facts is insufficient; boys and girls should also acquire the ability to state these facts in words. The questions and exercises of this book provide for instruction in both forms of expression. The movement of people toward the great centers of population is characteristic of modern society, and the leading cities of Europe have been accorded considerable space in this volume. Railway and steamship lines are given fuller treatment than is usual in elementary textbooks. It is believed that such an account of the facts of geography has been given as shall furnish clear, coherent and reasonable answers to those questions concerning cause and consequence which occur to the intelligent reader.

By the courtesy of Dr. George Sargent, Secretary of the American Museum of Natural History, the picture on page 154 is reproduced from a negative belonging to the Museum; the pictures on pages 143 and 168 are reproduced with the permission of D. Appleton & Co.; that on page 180 was furnished by Mr. Jacob H. Rohrbach. Acknowledgment is also made to Mr. Frederick Schwandhausser, Sr., for illustrations not otherwise credited.

The author finds it impossible to express adequately in these pages his obligation to many friends and colleagues for assistance and advice generously given in the preparation of this book, and must confine himself to a conventional acknowledgment of indebtedness to Miss Clotilde Victorine Chavent, Miss Sophia Regina Borger, Miss Margaret Aitkin, Mr. Oswald Schlockow, Mr. Claude L. West, Mr. Albert F. Chadwick, Mr. George H. Chatfield, Mr. John R. Wilson and Mr. John W. Davis.

W. R.

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EUROPE

INTRODUCTION

The Eastern Hemisphere contains most of the land upon the globe. As in the Western Hemisphere, the land is nearer to the North Pole than to the South Pole. The northern land mass, or grand division, is Eurasia. Southeast of it lies the island or continent of Australia, the smallest of the grand divisions. To the southwest is Africa, joined to Eurasia by the Isthmus of Suez. The Suez Canal, which connects the Mediterranean Sea and the Red Sea, is an artificial waterway separating the two grand divisions.

The five oceans surround the land of the Eastern Hemisphere, and one of them, the Indian Ocean, is wholly in that half of the globe. The other four extend into the Western Hemisphere.

The Eastern Hemisphere is known as the Old World, to distinguish it from the New World, or America, the Western Hemisphere, discovered by Columbus in 1492 A.D. The history of the Old World goes back more than four thousand years before that date. This is shown by written documents from Asia and Africa, which date at least as early as 2500 B.C. The highest civilization, however, has been reached in the northwestern section of Eurasia. This section, which is called Europe, lies north of Africa, and is separated from the main mass of Eurasia, which is called Asia, by the Ural Mountains, the Ural River, the Caspian Sea and the Caucasus Moun-

tains. It has long been customary to regard Europe and Asia as separate grand divisions, although they form one continuous land mass. This traditional and common-sense view is on the whole justifiable. Europe has played a commanding part in both ancient and modern history. From it as a center of culture, the New World has received its civilization. The science and study of geography had its origin in Europe. Even now Asia is but slowly reaching out to a knowledge of the other continents.

Questions

(Turn to the frontispiece map.)

1. What grand division of the Eastern Hemisphere is south of the Equator?
2. What grand divisions are north of the Equator?
3. What grand division is partly north and partly south of the Equator?
4. Is most of the land of the Eastern Hemisphere north or south of the Equator?
5. Which grand divisions extend south of the Tropic of Capricorn?
6. In what zone are the southern parts of these grand divisions?
7. Which grand divisions of the Eastern Hemisphere extend north of the Arctic Circle?
8. In what zone are their northern parts?
9. Which grand division is in three zones?
10. Name the three zones in which it lies.

EURASIA

Eurasia, from east to west, is the widest land mass in the world. The continuous distance from the Bay of Biscay to the Japan Sea is about 6,000 miles. The principal highlands of Eurasia approach close to the chief highlands of North America at Bering Strait, and follow

the shores of the Pacific and Indian oceans. From these main highlands a spur branches toward the west, and extends along the northern shore of the Mediterranean Sea until it terminates at the Atlantic Ocean. This spur constitutes the principal highlands of Europe. Like the Asiatic mountains, they are young, and consequently are high and rugged.

Questions

(Turn to the frontispiece map.)

1. From what line are parallels of latitude numbered?
2. What parallel passes through the Mediterranean Sea?
3. Is it in north or south latitude?
4. What parallel passes through Madagascar?
5. Is it in north or south latitude?
6. What shape have parallels of latitude? (Study a globe.)
7. How do they compare in size with the Equator?
8. What place north of the Equator has the highest latitude?
9. What place south of the Equator has the highest latitude?
10. What is the latitude of places on the Equator?

Exercises

On a slated globe, or wooden ball, represent the Equator. Represent two parallels in north latitude, and number them. Represent the parallel of 45° S. Lat. Explain why they are called parallels.

Questions

1. Find the meridian of 0° longitude. Through what part of Europe does it pass?
2. What meridian passes through the Red Sea?
3. In what direction is this meridian from the meridian of 0° ?



4. Is it in east or west longitude?
5. Which grand divisions are partly in east longitude and partly in west longitude?
6. Which grand division is wholly in east longitude?
7. What meridian passes through Madagascar?
8. Is it in east or west longitude?
9. Through what grand divisions does the meridian of 130° east longitude pass?
10. Are meridians all of the same size? What is the shape of a meridian? (Study a globe.)

Exercises

On a slated globe, or wooden ball, represent two meridians exactly opposite each other. Show what figure the two meridians form.

If one meridian is 20° E. what is the other? If one is 120° E. what is the other? If one is 96° W. what is the other?

Questions

I

(Turn to the map, pages 6, 7.)

1. What ocean is north of Europe? What arm of this ocean indents the northern coast?
2. What ocean is west of Europe? What two seas indent the western coast? What bay?
3. In what direction is the Mediterranean Sea from Europe?
4. To what ocean is it joined? By what strait?
5. What waters join the Black and Mediterranean seas?

II

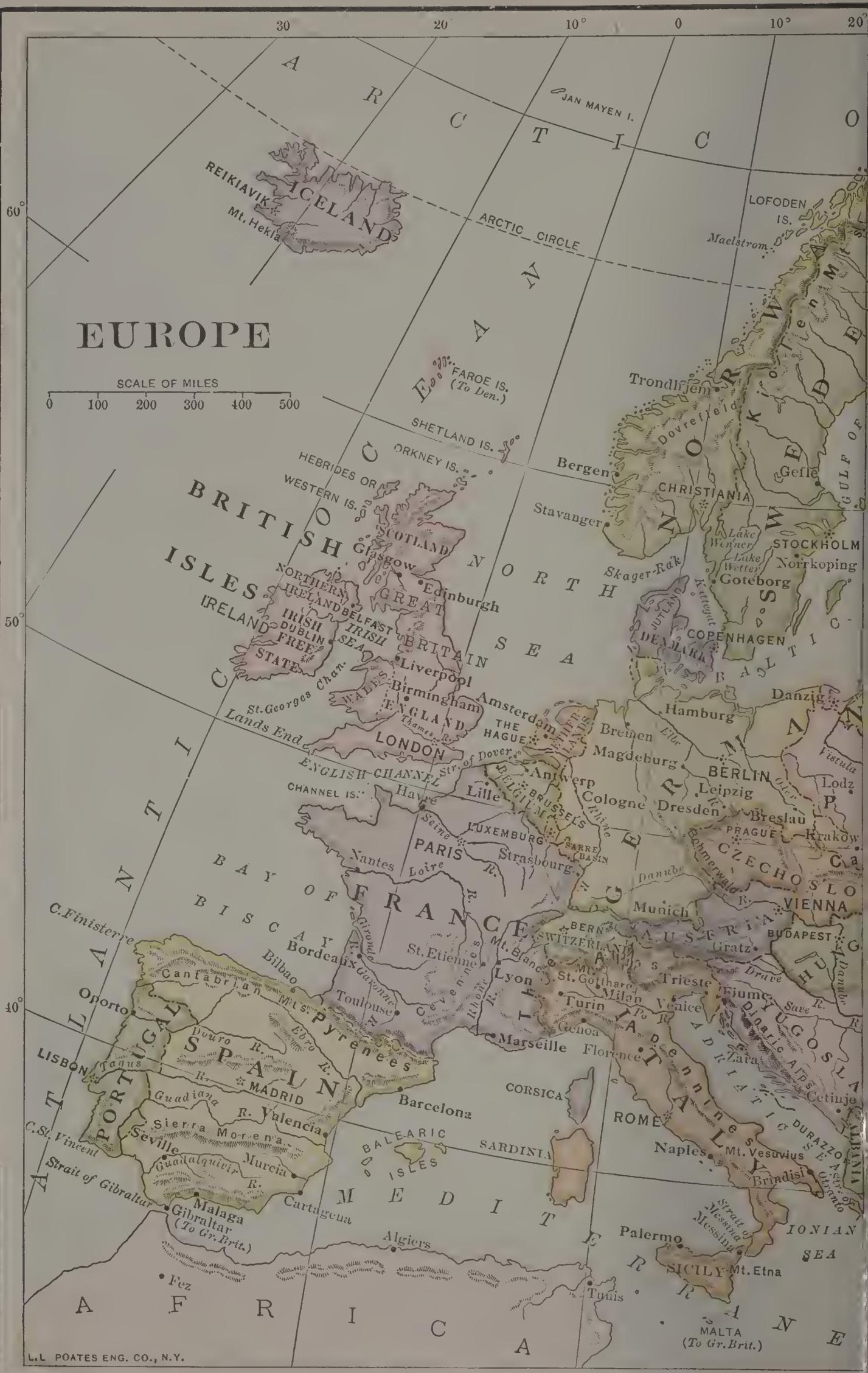
(Turn to the map, page 4.)

1. In what grand division is 30° south latitude and 150° east longitude?
2. In what grand division is 60° north latitude and 30° east longitude?
3. Where is 70° north latitude, 70° east longitude?

EUROPE

SCALE OF MILES

0 100 200 300 400 500



L.L. POATES ENG. CO., N.Y.

Longitude

West

10

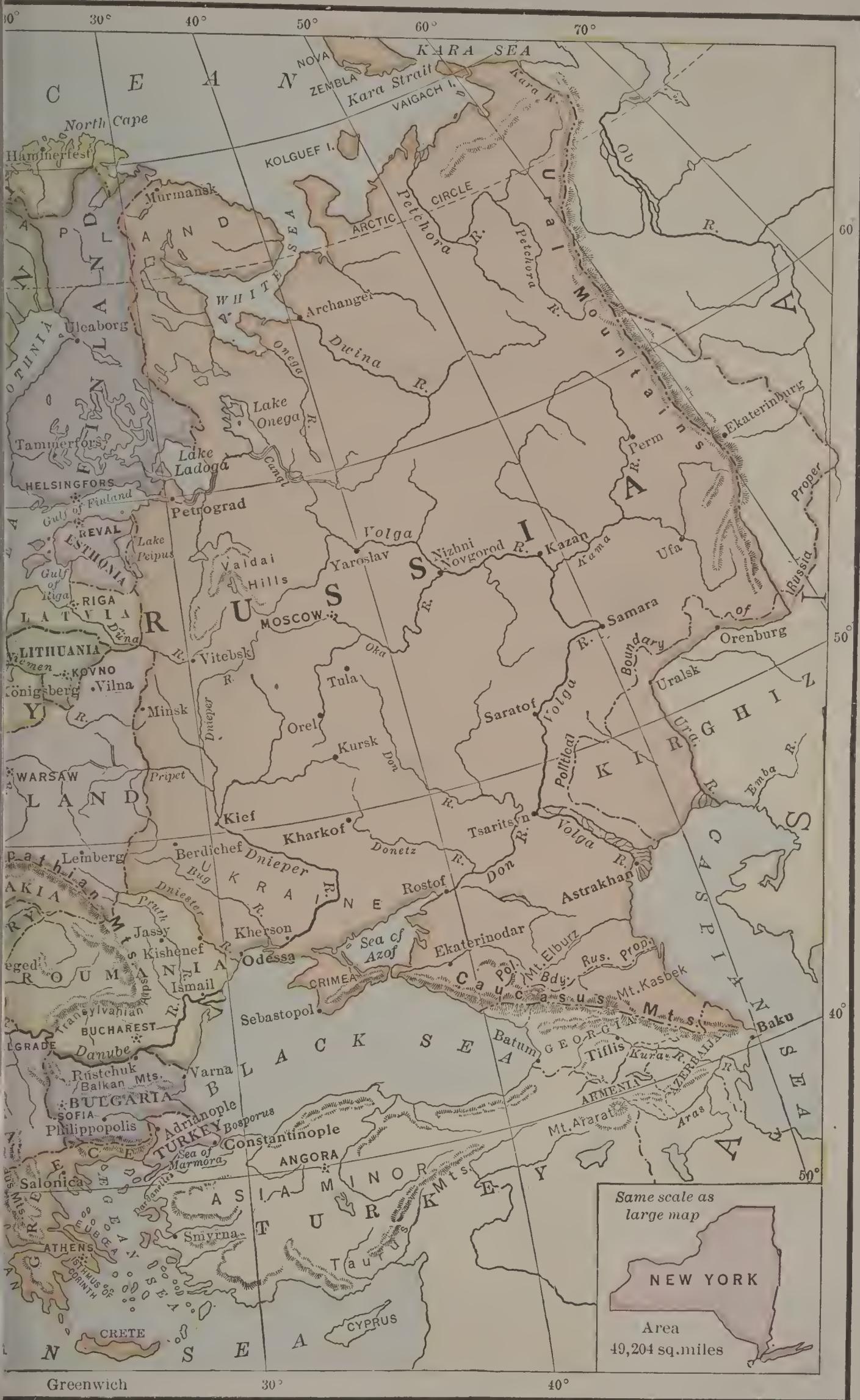
Longitude

10

East

from

20°



4. Where is 0° latitude, 0° longitude?
5. Where is 35° S., 50° E.?
6. What is the approximate latitude and longitude of San Francisco?
7. What is the approximate latitude and longitude of the Isthmus of Suez?
8. What is the approximate latitude and longitude of Iceland?
9. Between what parallels does Eurasia lie?
10. Between what meridians does Eurasia lie?

Exercises

Draw from memory, in a circle, as large as possible, a map of the Eastern Hemisphere. Show the Equator and shade Europe.

Mark the parallels which divide the zones, and write their names.

Do this in two minutes.

PART I.--EUROPE AS A WHOLE

CHAPTER I

THE PHYSIOGRAPHY OF EUROPE

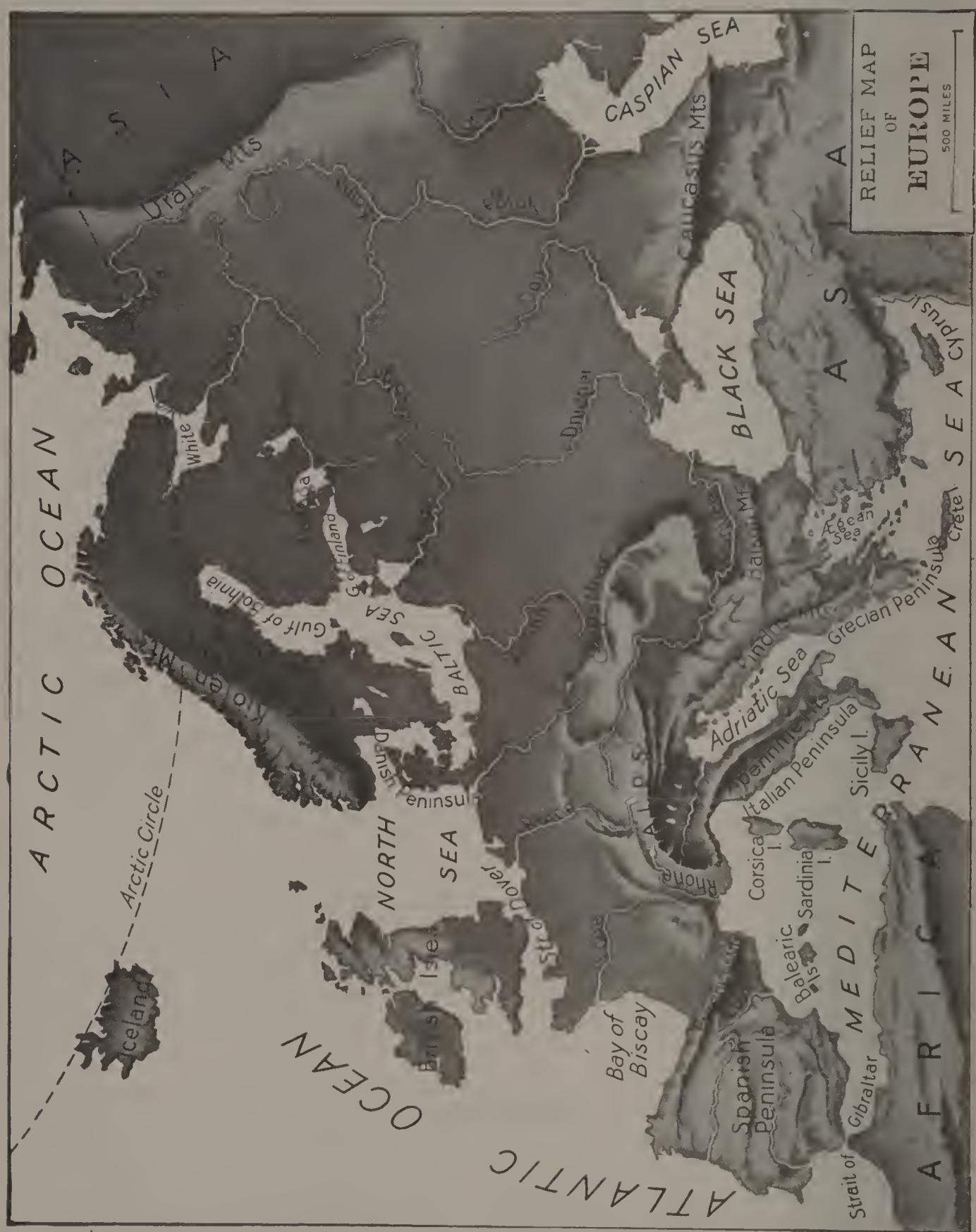
Location. Europe is nearly in the center of the land masses of the world. This position enables Europeans the more easily to carry on business in every quarter of the globe. Three thousand miles away, across the North Atlantic, lies North America. South America, by reason of its projection eastward, is about the same distance from the ports of southwestern Europe. The voyage to the west coasts of North and South America is made through the Panama Canal. Africa lies across the Mediterranean Sea. Southern Asia and Australia are reached by way of the Suez Canal and the Red Sea. The ports of those regions on the Pacific Ocean can also be reached through the Panama Canal.

Size. Excepting Australia, Europe is the smallest grand division. Its area, including the islands near by, is nearly 3,900,000 square miles. It is about the same size as the United States.

Questions

I

1. What island in the Arctic Ocean north of Europe?
2. What large island in the North Atlantic west of Europe?
3. What is the chief group of islands on the coast of Europe?



4. What waters separate them from the mainland?
5. Name five islands in the Mediterranean Sea. Name two groups of islands.
6. Which are the two largest islands east of Sicily? Which are the two largest islands west of Sicily?
7. Where are the Lofoden Islands?
8. In what direction from Asia Minor are the islands of the Ægean Sea?
9. Where are the Shetland Islands?
10. What is the most northern point on the mainland of Europe?
11. What two capes in southwestern Europe?

II

1. What waters inclose the Scandinavian Peninsula?
2. Between what seas is the Danish Peninsula?
3. What waters are on the coasts of the Spanish Peninsula?
4. Name the waters which surround the Italian Peninsula.
5. What waters inclose the Grecian Peninsula?
6. On which peninsula are the Kiolen Mountains?
7. What mountains are on the north of the Spanish Peninsula?
8. What mountains extend along the Italian Peninsula?
9. Where are the Balkan Mountains?
10. What mountains are between the Black and Caspian seas?

Coast Line. Long peninsulas extending into the sea, and long arms of the sea reaching far into the land, make the coast line of Europe enormous in length, and afford it commercial advantages superior to those of the rest of the world. These irregularities are caused by the sinking of the land. In proportion to its area, Europe has far more indentations than any other grand division. Europe has 20,000 miles of coast line, Asia has 38,000 miles, and North America has 27,500 miles. Asia

has about two miles of coast to every 1,000 square miles of area; Europe has more than five miles of coast to every 1,000 square miles of area.

The largest peninsula is the Scandinavian, separated from the mainland by the Baltic Sea and the Gulf of Bothnia, and from the Danish Peninsula (or Jutland) by the strait whose two divisions are called the Skager-Rak and the Kattegat (page 6).

The Spanish (or Iberian) Peninsula and the other peninsulas of southern Europe are mountainous.

The Italian Peninsula is formed by the Apennines, which extend southeast from the Alps.



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The Balkan Mountains.

The Grecian Peninsula is the most irregular of all. A much larger area, extending north to the Danube River, is sometimes called the Balkan Peninsula. This is separated from the Italian Peninsula by the Adriatic and Ionian seas, and from Asia by the Black Sea, the Ægean Sea, and the chain of waters consisting of the

Bosporus, Sea of Marmora and the Dardanelles (pages 6, 7). At the south of this peninsula the sinking of the coast has submerged many mountains, whose rocky tops, projecting above the waters of the *Æ*gean Sea, form the picturesque Grecian Archipelago.

The British Isles are separated from the mainland of Europe by the North Sea, the English Channel and the Strait of Dover, the latter being only 21 miles wide. At a remote age these islands were joined to the continent, as in a still earlier age southern Europe was joined to northern Africa.

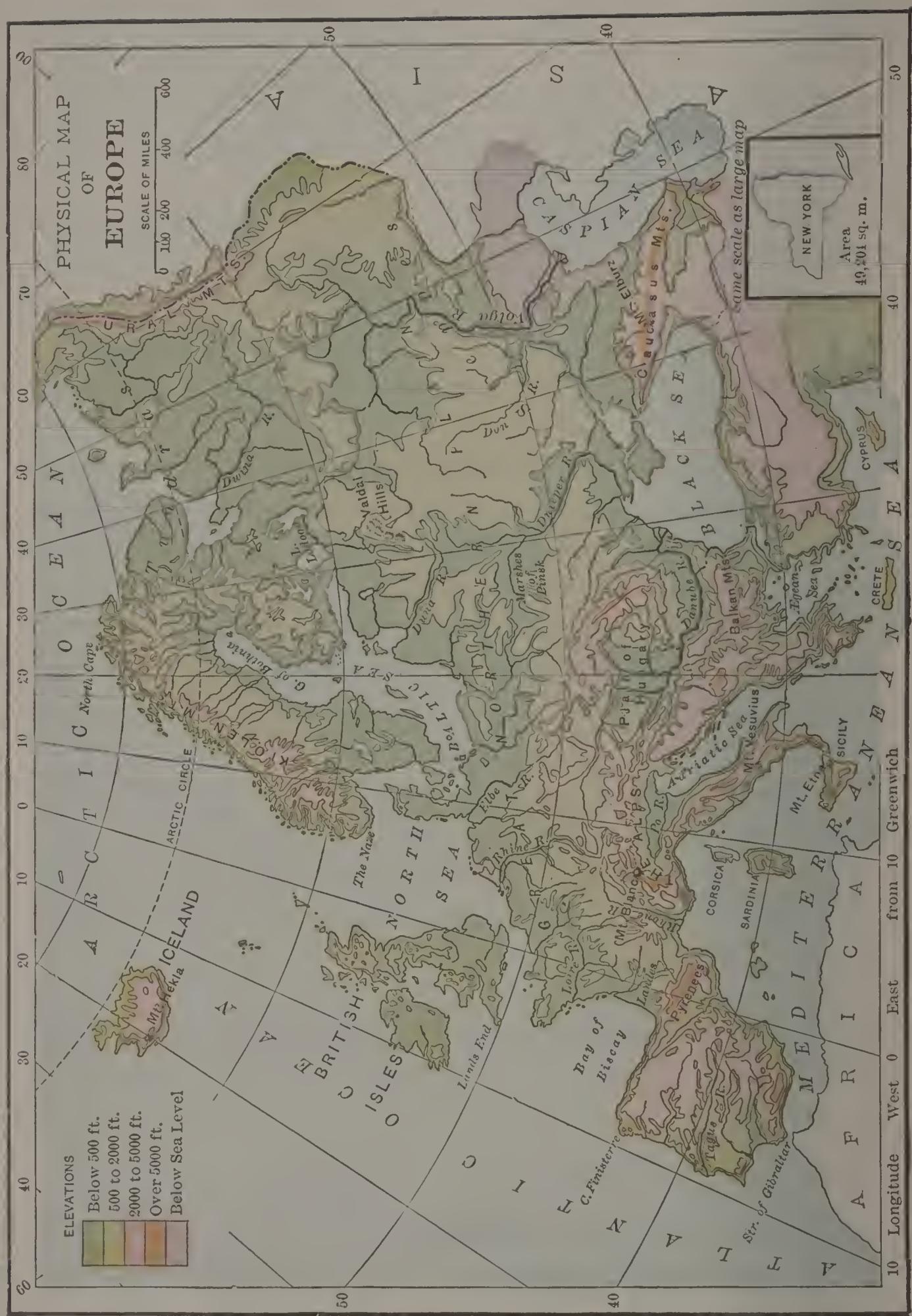
The bottom of the Atlantic Ocean slopes upward gradually like the side of a plateau. Between the western shore of Europe and the British Isles, the ocean is comparatively shallow, its depth being but a few hundred feet. This and the neighboring parts of the ocean bottom may be regarded as a part of Europe which has been overflowed by the sea. Such a part of the ocean bottom is called a Continental Shelf.

A long, crooked arm of the Atlantic Ocean reaches in between southern Europe and northern Africa. It separates those two grand divisions and extends east 2,200 miles to Asia. It is the Mediterranean Sea, so called because it lies in the midst of the surrounding lands (*medi* means mid; *terra* means land). The narrow Strait of Gibraltar connects the Mediterranean with the ocean. The shores of the Mediterranean Sea, with those of the Caribbean, rank next to those of the Pacific Ocean as a region of volcanoes and earthquakes.

Questions

(Turn to the maps, pages 6, 10.)

1. What is the most western longitude of Ireland? Of Iceland? How many degrees farther west is Iceland?



2. Name the long and narrow peninsulas of Europe.
3. Which of them are mountainous?
4. Name the mountain range, if any, on each peninsula and state its direction.
5. Name the broad peninsulas.
6. Name the principal mountain ranges in each and state their direction.

Exercises

Sketch from memory an outline map of Europe.

Make a list of the principal islands on the coast of Europe.

Trace a voyage by sea from Petrograd to Odessa, and make a list of the waters through which you would pass.



A vessel in a Norwegian fiord.

Surface. Europe consists of a mountainous region in the south, and a great central plain bordered on the northwest and east by low mountains.

Highlands. In the northwest of Europe, that is, in the Scandinavian Peninsula and in Scotland, the mountain

ranges are old, and greatly worn by weathering. They are flat-topped, and are noted for their deep valleys, which extend to the sea. As the coast has sunk, the ocean has drowned the valleys, which are known as fiords in Norway and firths in Scotland. Farther south, where the mountains are not so near the coast, the same process has produced the great estuaries of the Gironde and the Thames, and separated the British Isles from the mainland.

The Ural Mountains extend from north to south, like the northwestern mountains, and form in part the eastern boundary of Europe.



Mt. Blanc and the Valley of Chamonix.

The loftiest mountains of Europe are found in the south. They extend in various directions, though the highest ranges, the Alps, the Caucasus, the Pyrenees, the Carpathians and the Balkans, extend from east to west.

The Alps are the highest mountains wholly in Europe, the highest peak, Mt. Blanc, in France, being over 15,000

feet above sea level. The Alps are noted for the grandeur of their snow-covered peaks, beautiful lakes, deep valleys, and for their extensive and numerous glaciers.



The Rhone glacier.

Glaciers are great masses of ice formed from the snow which accumulates in the high valleys. The glaciers slowly but continually force their way down the mountains, and, melting at the lower end, become the sources of rivers. Three of Europe's principal rivers, the Rhine, the Rhone and the Po, have their sources in Alpine glaciers. The "Mer de Glace" (sea of ice) on Mt. Blanc is the most famous glacier in the Alps.

Questions

(Turn to the map, pages 6, 7.)

1. What meridian passes along the Ural Mountains?
2. In what direction do meridians extend?
3. In what direction do the Ural Mountains extend?
4. In what direction do the Pyrenees extend?

Exercises

Sketch a map of Europe, and indicate the highlands and the lowlands by shading.

Make a list of the mountain ranges which extend east and west.

Make a list of the mountain ranges which do not extend east and west. State the direction of each range.



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A wheat field in Germany. A part of the great plain of Europe.

Lowlands. The great plain of Europe covers two thirds of the grand division. It extends from the Arctic Ocean to the Black Sea, and from the Ural Mountains to the Bay of Biscay and southern England. By the sinking of the land a part of the plain was submerged, and thus the shallow Baltic and North seas were formed. In the Netherlands the plain dips below the sea, and the people of

that country spend enormous sums yearly in maintaining dikes to keep the waters of the North Sea from flooding their land. On the other hand, the eastern part of the great plain, which covers almost all of Russia, is so flat as to show that it was at one time beneath the sea. So level is the Russian plain that the rivers, in their course from source to mouth, fall only a few inches to the mile.



A mountain torrent, Norway.

Drainage. Because some of the mountain ranges extend north and south, and others east and west, the surface is divided into a number of small river basins.

The central watershed is the Alps. The rivers which rise there find widely distant outlets. On the northeast is a branch of the Danube, which flows eastward to the Black Sea; on the south are tributaries of the Po, which flows eastward into the Adriatic; the Rhine flows north into the North Sea, and the Rhone makes its way southward into the Mediterranean.



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The upper Danube.

Most of the rivers flow through broad plains, and are available for navigation. They give access to the interior and aid commerce. To this fine system of natural waterways the enterprising Europeans have added canals to join the lakes and rivers, availing themselves of the plains that intervene. Thus it is possible to travel by water across Europe from the North and Baltic seas to the Caspian and Black seas, thence to the eastern Mediterranean, and from the western Mediterranean to return northward by rivers and connecting canals.

Several long rivers rise in the Valdai Hills and the height of land which extends northeast from them.

Some of the streams in the mountains of Scandinavia and Switzerland afford abundant water power.

Questions

(Turn to the map, pages 6, 7.)

1. What is the source of a river?
2. What is the mouth of a river?
3. At what part of its course is a river widest? Why?
4. How is this shown on a map?
5. What are the tributaries of a river?
6. How many important tributaries has the Volga River along its right bank?
7. How many along its left bank?
8. What is the current of a river?
9. What is the longest river of Europe?
10. Trace the course of the Danube River.

Note.—In tracing the course of a stream begin at its source and end at its mouth.



The Matterhorn and Riffel Lake, Switzerland.

Europe, like North America, has many lakes. In the very distant past a great glacier or ice sheet covered the northern lands, and spread out southward. As the ice was forced along over the ground, it collected great masses of earth and rocks, and carried them long distances. When it melted the earth and rocks were left on the land, covering plains with new soil, and sometimes forming rounded hills. When deposited in valleys the earth and rocks often acted as dams to hold back the streams, thus forming lakes. There are many such lakes, especially in the Alps, in Scandinavia, and in the British Isles. Other lakes collect in hollows left in the glacial deposits.

Lake Ladoga is the largest body of fresh water in Europe. It is about the same size as Lake Ontario.

Questions

(Turn to the map, page 14.)

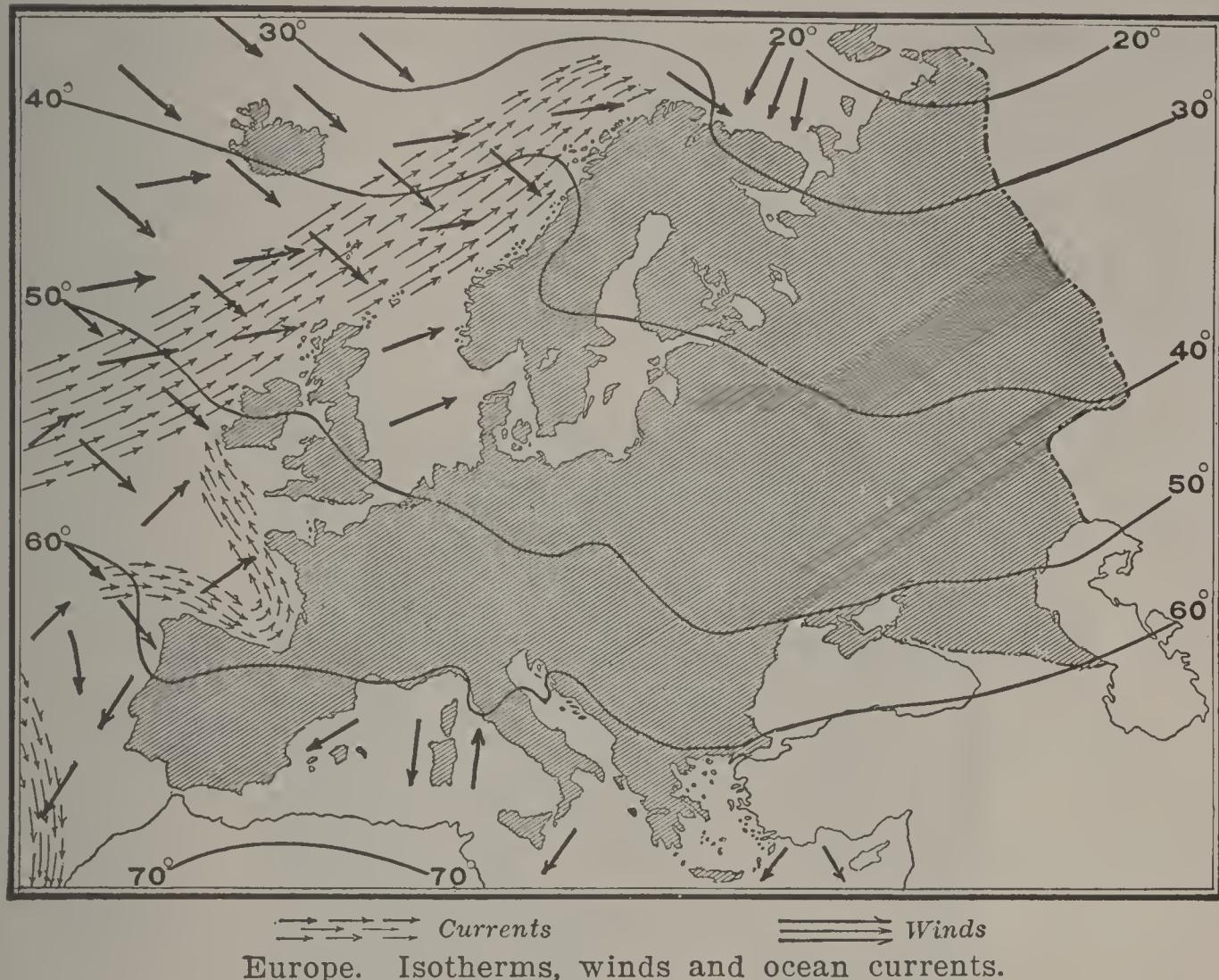
1. Why are rivers represented by irregular lines? What do the irregularities show?
2. How high is the source of the Rhine River?
3. How high is its mouth?
4. In what direction does the Rhine River flow?
5. What makes it flow in that direction?
6. What is a delta?
7. Why is it so called?
8. How is a delta formed?
9. How is a delta sometimes represented on a map?
10. Name two European rivers that have deltas.

Exercise

Draw a map of Europe. Mark the mountain ranges and show the important rivers.

Climate. Europe has the most temperate, equable and healthful climate of all the grand divisions on the globe.

We may divide Europe into three climatic belts. The northern part, a region of tundras, or frozen swamps, has



Europe. Isotherms, winds and ocean currents.

a cold, bleak climate. South of this, and due east of Canada, is a forest belt where the climate is temperate, not unlike that of the northern United States, and conducive to the growth of grains. The southern portion of Europe, which is in about the same latitude as that part of the United States between Massachusetts and Virginia, has a subtropical climate, and produces such fruits as figs, oranges, lemons, dates and olives, which, on the Atlantic coast of our country, if found at all, are found only in Florida. From this we see that the climate of Europe is milder than that of the countries in the same latitude on the opposite side of the Atlantic.

Great bodies of water moderate the cold of winter and the heat of summer. Water does not become heated so quickly as does land; it also gives out heat more slowly than land. Land absorbs heat and also radiates it quicker than does water. In summer land is warmer than the

bodies of water which are near it, and in winter it is colder than the adjacent bodies of water.

Winds blowing from the water to the land are cooler in summer than the land, and lower its temperature. In winter such winds are warmer than the land; so they make the land warmer than it otherwise would be. The winds



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Scene in the south of France.

thus make the temperature of the land and of the water more nearly alike. They also make the summer and winter temperature of the land more nearly uniform. For these reasons they are said to exert an equalizing effect upon climate. Places near the water are warmer in winter and cooler in summer than those farther away from the water.

The prevailing winds of Europe blow from the southwest. The heat of the warm Gulf Stream is brought

by the vapor-laden westerlies to western Europe. As they progress inland, they gradually lose heat and moisture. The warm westerly drift of the Atlantic bathes the shores of western Europe and in winter keeps the harbors free from ice. Hence the coast of western Europe is moister and warmer than the interior in the same latitude, a condition similar to that found along the Pacific coast of the United States. In summer the westerly winds make western Europe cooler than it would otherwise be, for then the temperature over the water is cooler than that on land.

Southern Europe is affected by the hot winds from the Sahara, which blow across the Mediterranean Sea.

The cold winds from the Arctic regions blow unimpeded across the Russian plain in winter to the very center of Europe, freezing great portions of Russia and harbors on the Baltic Sea and its branches.

If it were not for the east to west direction of the



lofty mountains the climate would not be so equable, nor would the rainfall be so well distributed. Unhindered by barriers and helped by the long arms of the ocean, the westerlies reach far into the interior, tempering the climate and gradually yielding their moisture. Only in the eastern part of Russia, which is not subject to the moderating influence of the ocean, and where the westerlies have become dry winds, do we meet with extremes in temperature and with severe droughts.

The high Pyrenees and Alps stand like great walls, and prevent the hot African winds from spreading over northern Europe. In winter they stop the cold northwest winds from producing frosts in southern Europe.

Questions

(Turn to the map, pages 6, 7.)

1. Between what parallels of latitude does Europe lie?
2. Between what meridians does Europe lie?
3. Which is farther south, Petrograd or Christiania?
4. Which is farther east, the mouth of the Volga River or the mouth of the Petchora River?
5. Which is farther west, the Shetland Islands or the Strait of Dover?

Note.—In answering the fourth and fifth questions first find the longitude of each place, and then make your decision. Remember that places on the same meridian are directly north and south of each other.

Exercises

Trace the meridian of 10° east longitude. Make a list of the countries, waters, rivers, mountains and cities which it crosses. In what direction are they from one another?

Trace the parallel of 40° north latitude. Make a list as in the previous exercise.

Write from memory all that you know of the physical features of Europe.

CHAPTER II

PEOPLE AND PRODUCTS

Population. In proportion to its size, Europe has more people than any other grand division. Asia alone has a greater population, but Asia, which is more than four times as large as Europe, has less than twice the population of Europe. One fourth of all the people of the globe live in Europe. Its population of over four hundred million is more than three times that of North America, and four times that of the United States.

Chamois are very shy, and live in herds of fifteen or twenty in the regions of perpetual snow. They leap with ease across crevices eighteen feet wide and down chasms thirty feet deep. The skin is very soft. The yellow leather sold as chamois skin is usually made from the hides of other animals.



Chamois.

Vegetation. There are three principal belts of vegetation in Europe. The south is the land of the vine, orange, lemon, lime, fig and rice.

Immediately north of this belt, between the Valdai Hills and the Alps, is the great beet-sugar, grain and

forest belt. This section vies with the United States in its output of cereals.

The extreme northern part of the great plain is frozen and covered with snow for ten months of the year. In summer it is transformed into swamps and marshes, where moss, lichens and dwarf trees and shrubs grow.

Animals. Europe is so densely populated, and so much of the land has been taken for agricultural purposes, that the number of wild animals has been greatly reduced. In the Alps and Pyrenees are found the chamois and wild goat. Brown bears, wolves, foxes, wild boars, and fur-bearing animals, such as the mink, sable and martin, haunt the forests of Germany and Russia. London, Leipzig and Nizhni Novgorod rank with St. Louis as the greatest fur markets of the world.



Reindeer.

The reindeer, which furnishes half the food and clothing of the Lapps, is found on the plains of the North. Great herds have been partly domesticated. The seal and the walrus live along the icebound northern coast.

The stork's plumage is white, and its long bill and legs are bright red. It generally places its nest on buildings.



Storks.

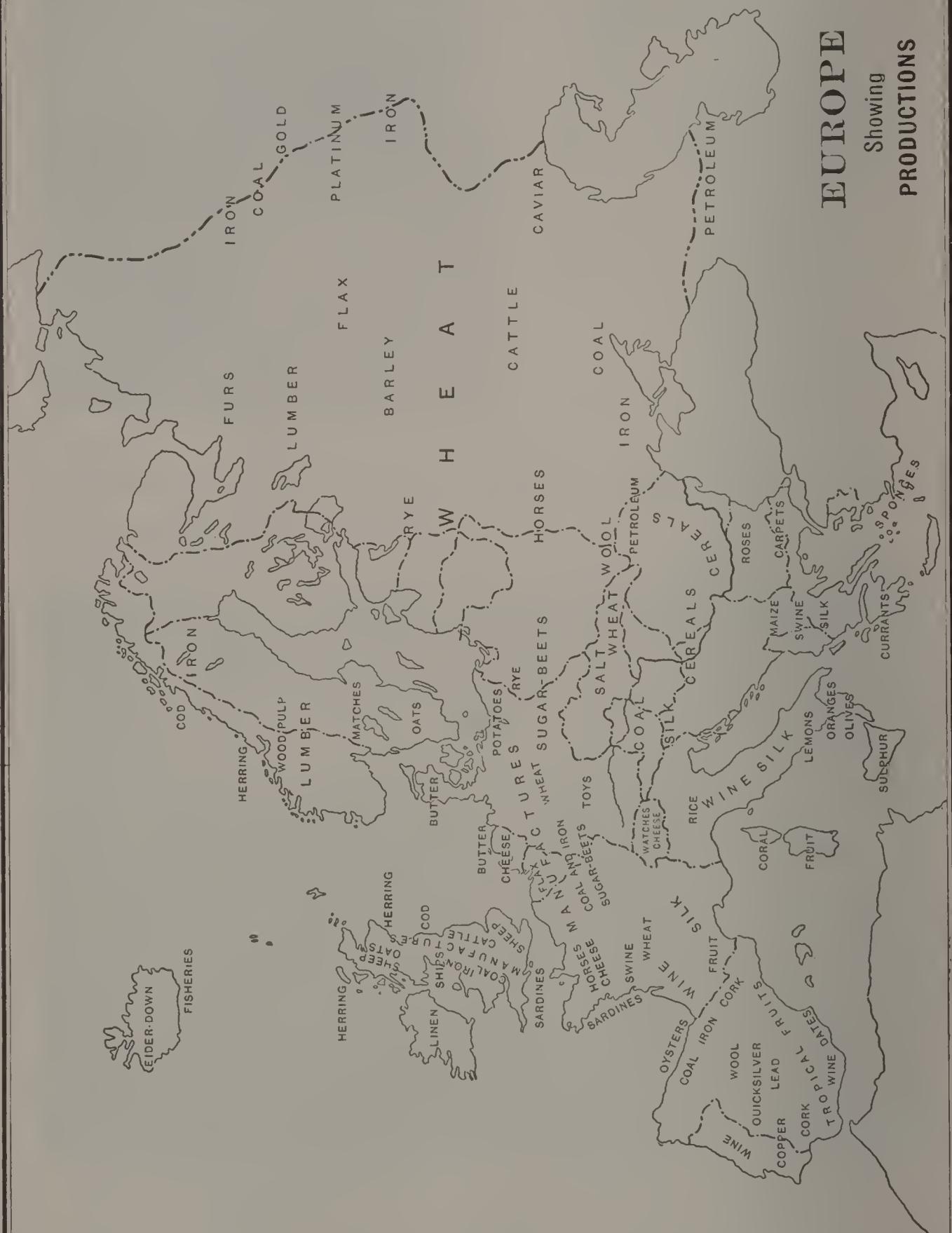
Some of the birds of Europe are interesting. The stork is among the largest, standing more than three feet high. In winter it flies south to Africa. The swallow also winters in Africa, and on its return northward is greeted as the harbinger of summer. The skylark is a favorite bird of western Europe. Whether caged or soaring at liberty, it sings the thrilling song which has been celebrated by the greatest writers.

The shallow waters of the Continental Shelf, as well as those of the Mediterranean and other seas, abound in oysters and in fish, such as the herring, cod, sardine, anchovy, tunny, salmon and sturgeon.

Among the domestic animals raised in Europe are horses, cows, sheep, hogs and fowls. These are noted for the excellence of their breeds. The horses of France, the sheep of England, the hares of Belgium, and the cattle of the Netherlands and of the Channel Islands, are examples of the excellent domestic animals which can be raised by careful and intelligent breeding.

Minerals. The highlands of Europe are rich in minerals. Coal and iron are found in England, Germany, France and elsewhere; iron in Spain and Sweden; salt

EUROPE
Showing
PRODUCTIONS



in Poland and Czechoslovakia ; graphite in Russia ; petroleum in Poland and Roumania ; marble and sulphur in Italy ; quicksilver in Spain ; potter's clay in England, France and Germany ; tin in Wales. Other minerals are lead, zinc and copper.

Exercise

On an outline map indicate some of the leading products. Use a different style of shading, or a different color, for each product. Make a key to the map.

Industries. The industries are so varied and well developed that Europe has become the greatest center of commerce in the world.

The artisans of Europe are very skillful. The machinery made by them, and their manufactured products,



At work in a pottery in England.

are highly finished. In almost every important city trade schools have been established. The leading nations depend upon these schools to train their mechanics.

In art and culture Europe leads the world. The great universities are famed for thorough instruction and the great learning of their professors. In numerous galleries

and libraries there repose the masterpieces of art and literature which are at present, as they have been for many centuries, the sources from which thousands of visitors and students draw instruction and inspiration.

Government. Many of the European nations are republics. France is the leading republic, and Switzerland the oldest. The others were, until recently, monarchies.

Great Britain and most of the other nations of Europe are limited or constitutional monarchies, that is, the ruler is called a king or emperor, and his descendants succeed to the throne, but his power is limited by a constitution, which provides for a parliament elected wholly or partly by the people. This body makes laws and has control over the finances of the nation. In Great Britain the king has hardly any power.

In some of the European countries, in which until recently the people took but little part in the government, there has been much disorder and civil strife, owing to their inexperience in governing themselves.

Danzig and the Sarre Basin are governed by the League of Nations. Fiume is a free city, not a part of any country.

People. The early inhabitants of Europe were at first barbarians. Little by little they were influenced by the people of Asia and of the Nile Valley, and attained some degree of civilization. Foremost were the Greeks. They developed rapidly, and at one time were the most advanced of all peoples in literature and art. There were, however, frequent wars among the different tribes; Greek fought against Greek and that weakened their power to resist invasion. Meanwhile the Romans became the leaders of Europe. They were a warlike people who, with great leaders, like Julius Cæsar, conquered tribe after tribe in the regions beyond Italy, and estab-

lished a mighty empire, bounded on the north by the Rhine and Danube rivers. They learned much from the Greeks, whom they conquered, and later they became Christians. The barbarians beyond the Rhine and the Danube came in contact with the Romans, and in time learned their arts and adopted their religion. The Romans, having become rich, indulged themselves in all sorts of luxuries, while the barbarians were continually increasing in power. They ceased to fear the Romans, and finally conquered them.

Nine tenths of the Europeans belong to the Caucasian race. Three great branches of this race living in Europe are the Teutons, the Latins and the Slavs.



A group of Russian peasants.

The Teutons inhabit England, Germany, the Netherlands and Scandinavia. They are the descendants of barbarian peoples such as conquered the Romans. Many people of this race live also in the United States, Canada, Australia and South Africa.

The Latin race is found in Italy, Spain, Portugal, Roumania and France. The French Canadians, the Portuguese of Brazil, and the Spanish of Mexico, Central America, and most of South America are the chief representatives of the Latin race in the New World.

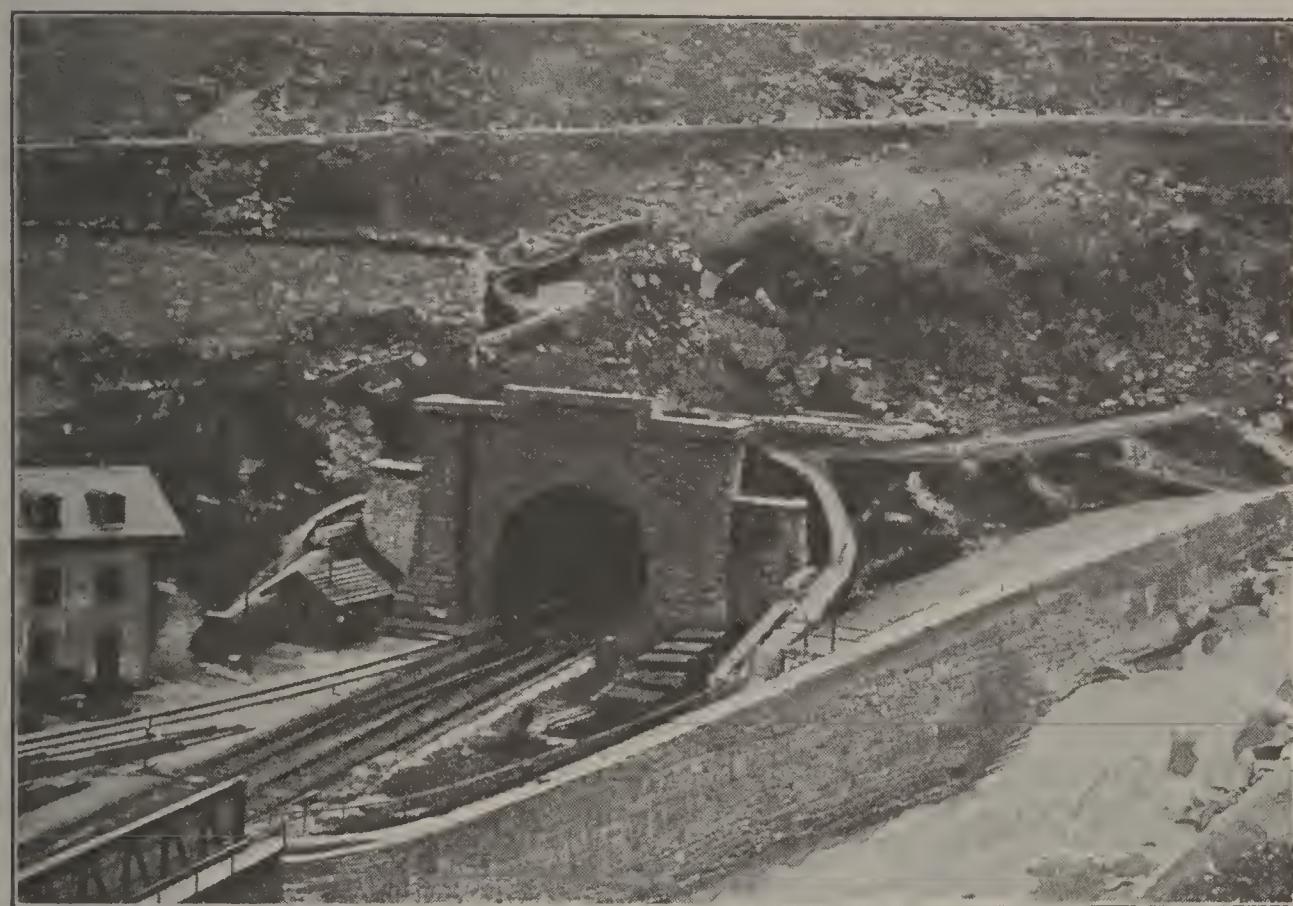
The Slavs live mainly in Russia, Poland, Czechoslovakia, Yugoslavia and Bulgaria.

A small number of Europeans belong to the yellow race. They are the Lapps of the icy regions, the Magyars of Hungary, the Tartars along the Volga, and the Turks. Most of these people were once or still are nomads. Nomads are people who live a primitive, roving life. Combined in great tribes, or families, they roam with their herds of horses or reindeer from place to place, living in tents or other temporary structures.

Religions. Christianity has been accepted by most of the people of Europe. In some countries it is the official religion, that is, the church and its officials are supported by the government. European missionaries have preached Christianity throughout the world. The three chief branches of the Christian faith in Europe are the Greek Catholic Church, the Roman Catholic Church and the Protestant denominations. Adherents of the Hebrew religion, as a rule of the Jewish race, are found in every country. The Mohammedan religion prevails in Turkey.

Railways. The steam engine was invented by Europeans, and early in the nineteenth century the locomotive was perfected by George Stephenson, an Englishman. Since that time the railways have enmeshed every important city of Europe in their network of iron. Railway communication has promoted the progress of western Europe, where railroads are most numerous. In many European countries, the government owns and manages the railways; and the engineers, conductors, porters and other employees are government officials.

The chief obstacle to transcontinental railroads was the mountain region of southern Europe. But the skill of engineers triumphed, and long tunnels pierce even the Alps. The St. Gotthard tunnel is nine and one quar-



Entrance to the St. Gotthard tunnel.

ter miles long. The Simplon tunnel, twelve miles in length, is the longest tunnel in the world.

Paris, Berlin, Vienna, Warsaw and Moscow are the leading railway centers, where railroads from the great ports of the west and south intersect those from the capitals and manufacturing towns of the interior.

From Paris, through the Mt. Cenis tunnel, trains travel to Brindisi on the Adriatic shore of Italy, where they connect with mail steamships for India, China and Australia. From Paris trains also run without change of cars to Rome and Constantinople.

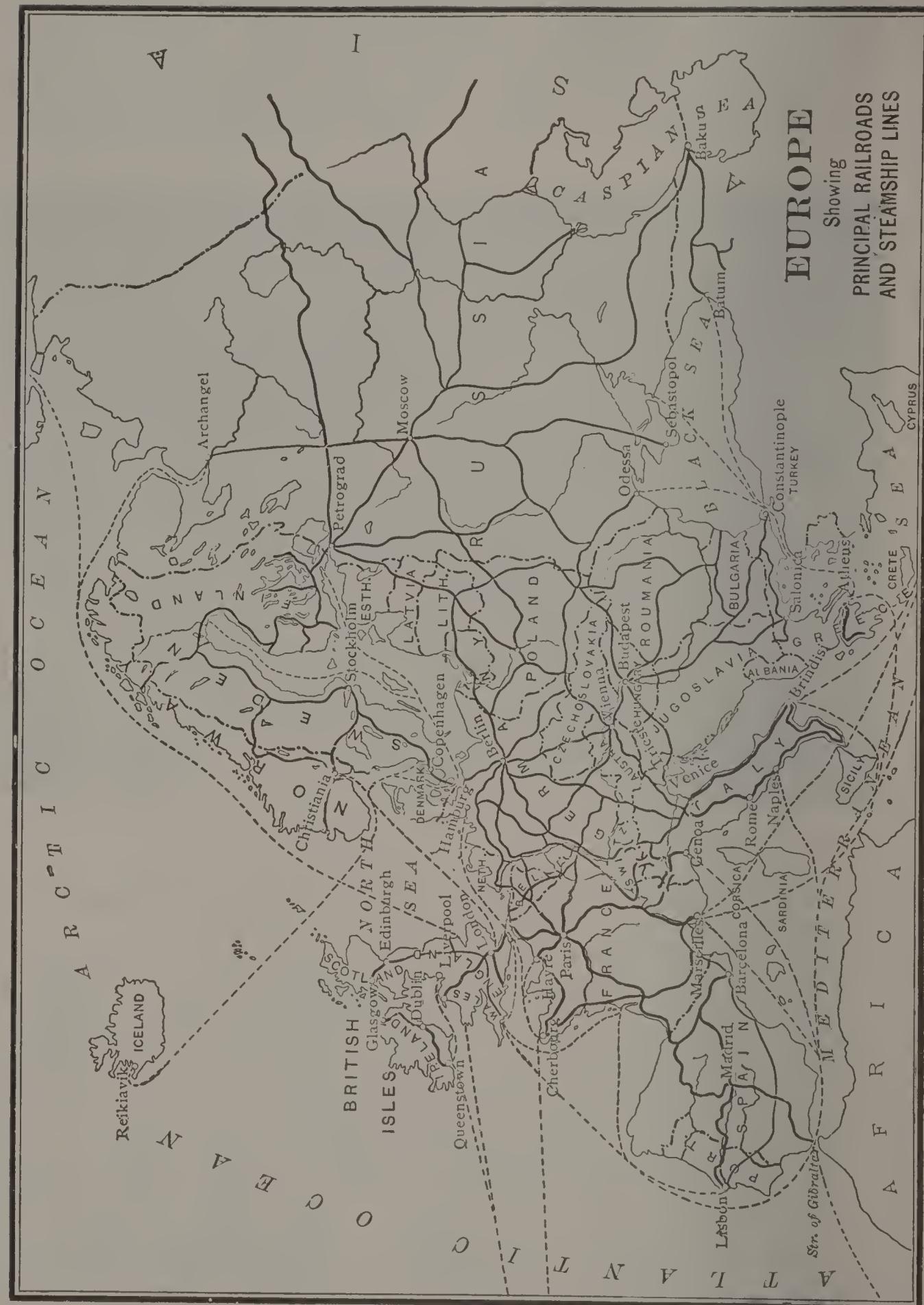
Steamship Lines. Ocean steamships travel between Europe and every important port of the world. There are two routes to the ports of the Orient; one around

EUROPE

Showing
PRINCIPAL RAILROADS
AND STEAMSHIP LINES

Showing

PRINCIPAL RAILROADS AND STEAMSHIP LINES



South Africa by way of the Cape of Good Hope, the other through the Mediterranean and Red seas by way of the Suez Canal. Vessels sailing by these routes sometimes return via the Panama Canal, thus circumnavigating the globe. The entire voyage has been made in about two months.

Across the Atlantic Ocean vessels ply between European ports and those of Canada, the eastern United States, the Gulf of Mexico and the Caribbean Sea, Brazil and the Plata River. The fastest ships make the trip from New York to the British shore, at Fishguard, Queenstown or Southampton, in less than a week. Slower vessels and those sailing from New York and other North American ports to the Baltic and Mediterranean seas take ten days or longer.

Air Routes. Travel by airplanes, for passengers and mail, is regularly maintained between London and Paris and between other cities, especially in Germany and France.

Telegraph, Telephone and Post. Nowhere are the mails so largely used as in Europe. The telephone and telegraph are everywhere. Like the railways and postal service, the lines are often owned and operated by the government. Submarine telegraph cables are looped along every coast. They stretch under the Mediterranean Sea to Africa and under the Atlantic Ocean to North and South America. In the North Atlantic a rise in the ocean bottom between Ireland and Nova Scotia is called the Telegraph Plateau. There are cables from southwestern Ireland and from Lands End, England, to Nova Scotia and Newfoundland. Other cables have been laid from France to Cape Cod, Massachusetts, and to the French island of St. Pierre, near Newfoundland. Messages are sent by wireless telegraphy across the ocean, between the shore and vessels at sea, and from ship to ship.

The Europeans have so many natural resources, and

their situation in the center of the land masses of the earth, with easy passage to every ocean, is so favorable for commerce, that they have reached a high state of civilization and power.

Questions

(Turn to the maps, pages xii and 14.)

1. Which parallel of latitude marks the western half of the boundary between Canada and the United States?
2. Through what part of Europe does this parallel extend?
3. Which country in North America is in about the same latitude as the principal highlands of Europe?
4. Which country in North America has about the same latitude as the lowlands of Europe?

Exercises

Draw a map of Europe and mark the lowlands and the highlands.

Make a list of the countries of Europe which are in the latitude of Canada.

Make a list of the countries which are in the latitude of the United States.

Name the great railway centers of Europe.

Name three important cities where railways terminate.

Write a brief, complete account of the products of Europe.

State what you know of the inhabitants of Europe.

PART II.—THE GREAT POWERS

Though Europe is next to the smallest grand division, it is the most important in commerce, wealth, art, population and civilization. The nations which have contributed largely to the modern development of Europe are England, France, Italy, Germany and Russia. These nations are the most powerful and are known as "the Great Powers."

Germany, defeated in the World War and impoverished, and Russia, weakened by political and economic revolutions, have less influence at present than the other Great Powers among the nations of the world. England, France and Italy, victorious in the World War, still maintain strong armies and navies, and they have vast, world-wide colonial possessions. The wealth and military strength of these three Great Powers are so overwhelming that, combined, they would be sufficient to compel the other countries to remain at peace.

The five Great Powers are large compared with other European countries, although small in comparison with the greater countries of North America and Asia. They are the richest in natural resources and the most populous of European nations; and England, France and Italy are pre-eminent in commerce and industry.

The United States and Japan occupy places of leadership in America and Asia similar to those of the Great Powers of Europe. Both have widespread possessions, a great export trade, and powerful navies.



Building occupied by the League of Nations at Geneva, Switzerland.

With a few exceptions, the nations of the world have united in the League of Nations, the purpose of which is to prevent future wars. The seat of the League is at Geneva, in Switzerland.

Exercise

Make a list of the Great Powers, with the capital of each. Commit the list to memory.

Note.—Write the countries in what you think is the best order. Tell why you think so.

CHAPTER III

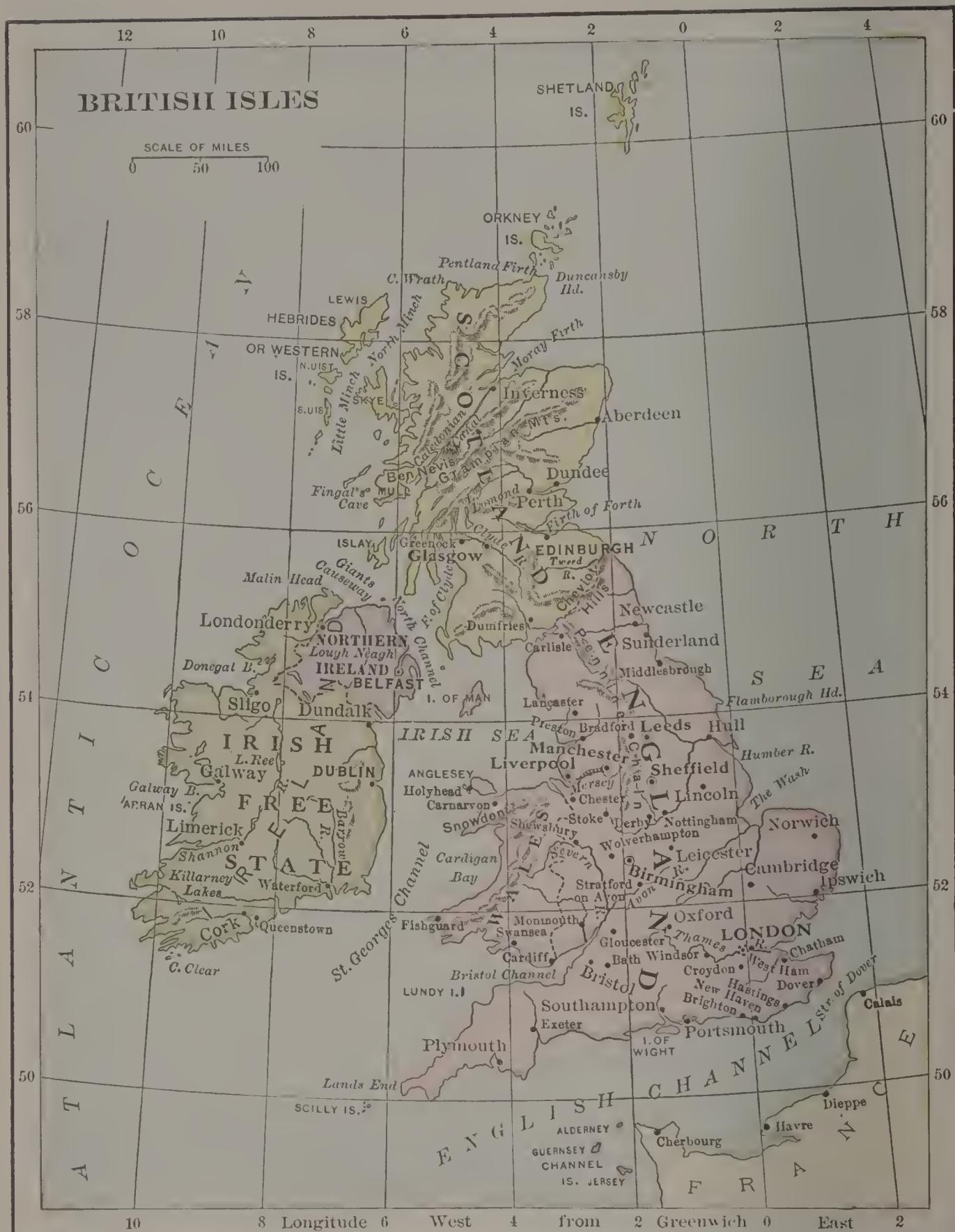
THE BRITISH ISLES

THE BRITISH EMPIRE

The British Isles are two large islands, Great Britain and Ireland, and from four to five hundred small islands, which fringe the coasts of the large islands. This group is known as the United Kingdom of Great Britain and Ireland. Great Britain includes England, Scotland and Wales. The United Kingdom is often called Great Britain or England.

The United Kingdom possesses colonies in Europe, Asia, Africa, Australia and America, and in many islands. So numerous are these possessions, which encircle the globe, that it is said the sun never sets on British soil. Indeed, one fourth of the people of the world are British subjects, and the British flag flies over about one fourth of the land surface of the earth. The United Kingdom and its colonies form the British Empire, the greatest empire of the whole world in extent, commerce and naval power.

It is no wonder that the United Kingdom has become so powerful. An enterprising people, surrounded by water, the inhabitants of Great Britain have for centuries explored the seas; hence its numerous possessions, which it is very successful in governing. In order to protect its colonies and commerce a large navy became necessary. Great Britain owns more than one fourth of all the merchant ships in the world to-day. Not only do English ships carry goods for their own country, but they are



hired to transport the goods of other countries. Great Britain's nearness to rich nations on the continent, and to North and South America, has increased its commerce. Other factors in British commercial supremacy are its coast line, with abundant havens, its temperate and invigorating climate, with abundant moisture, which

is favorable for agriculture and weaving, and the possession of abundant iron and coal.

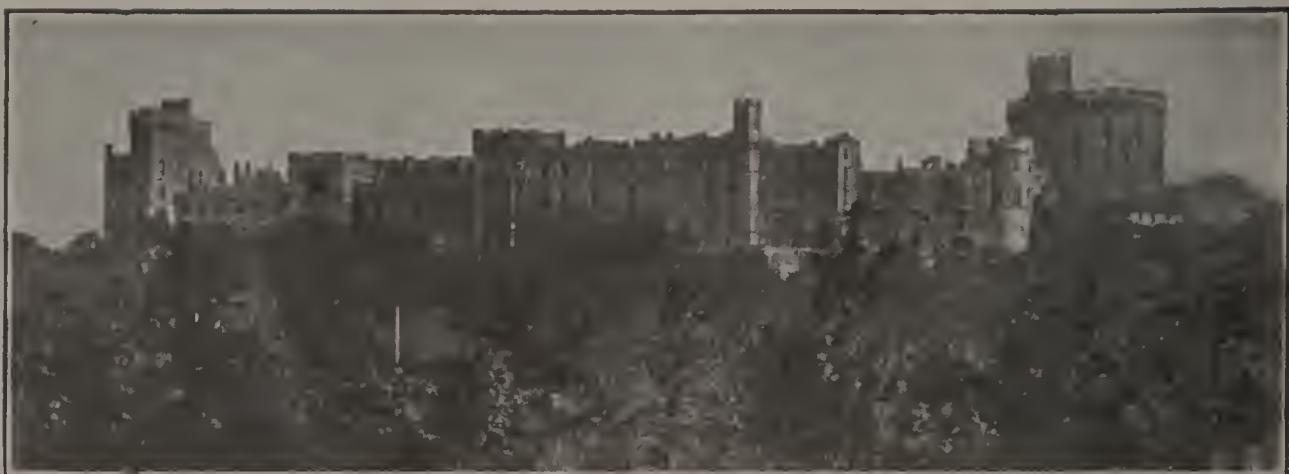
George V is, in name, the ruler of the Empire, as well as of the United Kingdom. The actual control of the government is in the hands of the British people. They have no written constitution, but the laws, customs and precedents of many centuries serve in place of such a document. The British Parliament resembles the Congress of the United States. It is the body of men who make



Westminster Palace, called "The Houses of Parliament," on the embankment of the Thames River. The two towers of Westminster Abbey appear at the left.

the laws. The members of the House of Commons are elected by the voters of the United Kingdom. It corresponds to our House of Representatives. The House of Lords is less like our Senate. Most of its members either inherit their membership from noble ancestors or are themselves appointed to the peerage.

The United States was a British possession until the Declaration of Independence in 1776 and the successful American Revolution made our country an independent nation. The fact that English is the language of the United States, is a strong bond between us and Great Britain.



Windsor Castle, on the Thames River, 23 miles west of London. It was founded by William the Conqueror and extended by later sovereigns.

GREAT BRITAIN

Surface and Coast Line. The soils of southern England and northern France are similar. This contributes to the belief that they once were joined. The sinking of the land has given Great Britain a very irregular coast line. The Hebrides, Orkney, Shetland and Channel islands, and hundreds of others about the coast, are the tops of former hills, which now project above the water. The submerged valleys make excellent harbors. There are so many places where the arms of the ocean reach far into the land, and the area of Great Britain is so small, that from almost any point the distance to the sea is short; this facilitates commerce.

Great Britain is mountainous in the north and west. The mountains are old and weathered, but somewhat rugged. This is due to the hardness of some of the strata. The hard rocks resist erosion and remain intact while softer substances surrounding them crumble away. The Scottish Highlands are noted for their hard granite peaks. Of these, Ben Nevis is the highest in Great Britain. The height of the mountains of Great Britain is not great. The southeastern part of the island is a lowland, a continuation of the great plain of Europe.

Climate. Great Britain is directly in the path of the westerlies, which bring abundant rainfall and temper-

the cold of winter and the heat of summer. Where there are no prolonged extreme temperatures man is better able to work. He is not numbed by prolonged cold, as in some parts of Russia, nor is he sluggish and improvident, as in the tropics. The Englishman's energy is due partly to race or ancestry and partly to the climate.

Questions

(Turn to the map, p. 42.)

1. Between what parallels and what meridians are the British Isles?
2. What country on the Atlantic coast of North America is in the same latitude?
3. Which section of Great Britain is highest?
4. Name the highest peak in Great Britain.
5. In what country is the highest peak?
6. What range of hills is between England and Scotland?
7. Where is the mountain called Snowdon?

ENGLAND

Size and Population. England proper is about the same size as the State of New York, but it has three and a half times as many people. Next to Belgium, it is the most densely populated country in the world.

Climate. The westerly winds make England temperate and moist. The moisture is so abundant that there is much fog. London fogs are sometimes so thick, mainly on account of the smoke, which deepens the fog, that one is unable to see objects a few feet away.

Surface and Drainage. In the north and west England is rugged, hilly and mountainous. Eastern England is a lowland. Many short rivers drain the land. The Thames and the Mersey are the most important, because their broad mouths, or estuaries, form fine harbors. The Mersey is subject to a great rise and fall of the tide, for



The Tower Bridge across the Thames, London.

which reason inclosed docks have been built. These stone docks extend for seven miles along its banks.

The Thames, upon the eastern side of the island, provides anchorage for thousands of vessels.

Products and Industries. At one time farming was the principal industry of the English. Now, if every acre of available land were cultivated, not enough could be raised to keep alive England's dense population. Only the common vegetables and hardy grains are raised. The English import foodstuffs from the United States, Canada, Argentina and Australia, and have turned most of the land into pasture. In the Cheviot Hills of northern England, and in the South Downs (hills) along the southern coast, are bred the Cheviot and Southdown sheep, noted for the excellence of their wool. Excellent cattle are reared in Jersey, Alderney and Guernsey, the Channel Islands off southern England.

The waters surrounding Great Britain abound in food fish, such as salmon, haddock, mackerel, herring and sole.

There are numerous fishing hamlets along the southern and eastern coasts. These, however, cannot afford the expensive equipments for extensive fishing trips, and so large cities, such as London and Hull, in England, and Aberdeen, in Scotland, have become great fishing centers.

The mineral wealth of England first attracted other nations to its shores. The early Phoenicians visited the



Europe. Coal and iron mines.

tin mines, which are still productive. Coal and iron are found side by side, sometimes in different veins of the same mine. Limestone, which is necessary for smelting the iron, is abundant. So extensively are the mines operated that more than a million persons work underground. Salt and valuable pottery clays are found.

Numerous rivers furnish water power, and even before the perfection of the steam engine by James Watt, a Scotchman, England was a manufacturing country. After the use of steam became general, the presence of

coal and wool in the same regions made manufacturing the chief industry. England leads all the countries of Europe in manufacture, and is surpassed in this respect only by the United States, although Germany lately was a strong competitor. Northeastern England, a region of coal, iron and wool, is devoted to the manufacture of woolen cloth, worsted, yarn, carpets, hosiery and blankets. The demand for wool for the manufacture of woolen products exceeds the quantity of raw wool obtainable in England, therefore much of the wool is imported from Australia, Argentina and India.

Though the woolen industry took root earlier, the cotton industry has surpassed it, for, though the soil of England proper cannot produce cotton, the damp climate is favorable for the handling of the cotton fiber. After the thread is spun the process of weaving is similar to that of wool, and the world-wide trade of England enables her to supply cotton goods to warm climes and woolen goods to colder countries. In the lands of the temperate zone both fabrics are needed. We find cotton mills in west central England, in and near Manchester. Billions of pounds of raw cotton are shipped to England from British colonies and from our Southern States.

Central England is noted for iron works, because a high grade of iron is mined there. Superior cutlery, however, is made of Swedish iron, and much iron ore comes also from Spain.

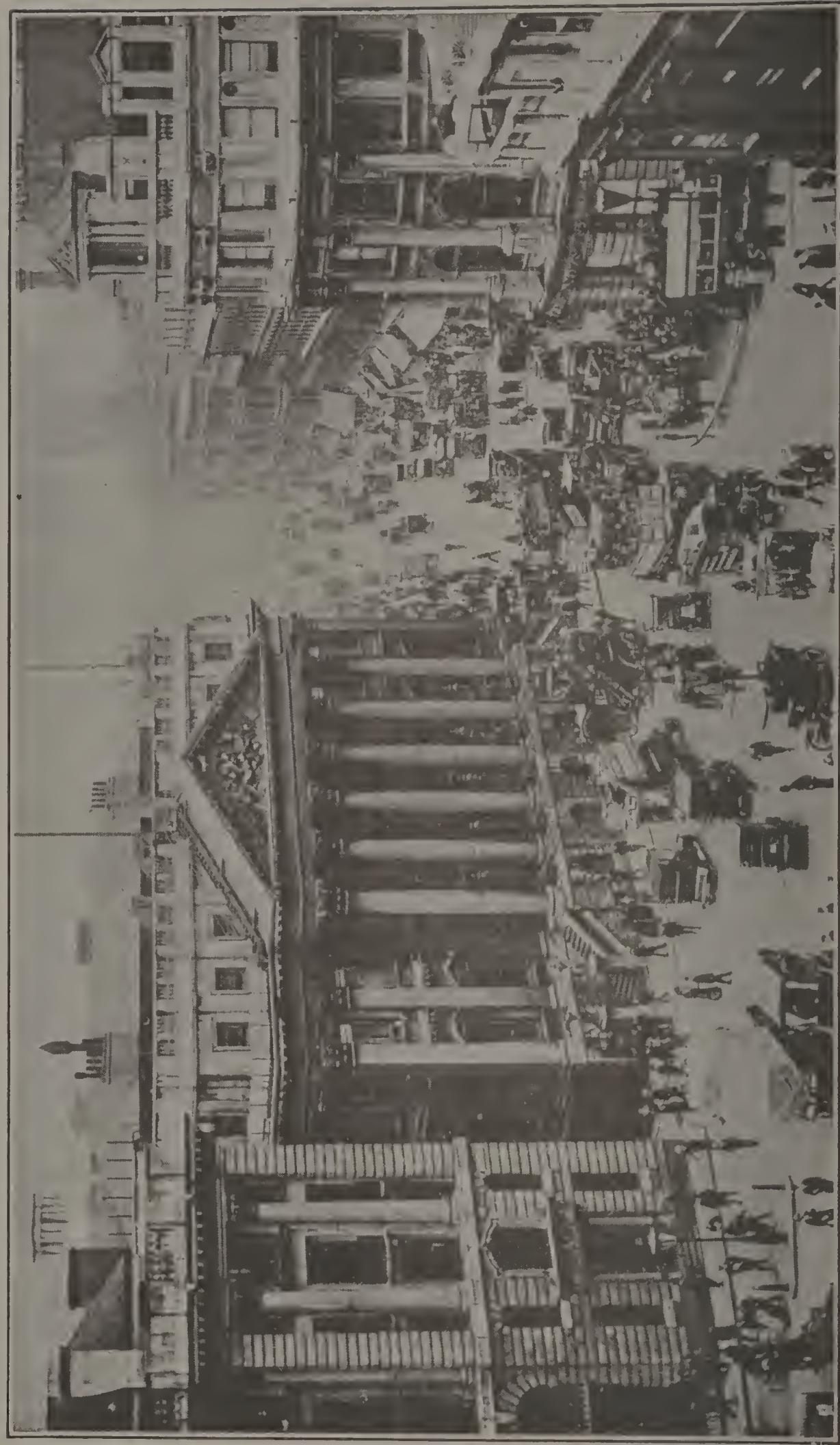
Commerce. Thousands of freight-laden vessels go in and out of the English ports daily. Besides being rich in resources, England has railroads and canals everywhere, and freight rates are low. The seaports are often far inland, and all are within short distances of manufacturing districts. Her great ports maintain lines of steamships to every quarter of the globe. London has lines to Australia and Japan. The Atlantic Transport

Line plies between London and New York. Liverpool and Southampton have lines to the Far East, to South Africa, the West Indies and South America. The American Line from New York docks at Southampton. From Liverpool there are lines direct to Montreal, Portland (Maine), Boston (Massachusetts), New York, New Orleans (Louisiana) and Galveston (Texas). Glasgow, in Scotland, likewise has lines to North and South America. The Canadian Pacific Railroad, which has fine vessels on the Pacific Ocean, has also a fleet connecting the eastern terminus of the road with Great Britain. Other important lines between Great Britain and the United States are the Cunard and White Star lines.

The first locomotives and railways were built in England, and the railroads of the British Isles are excellent. London is the terminus of all the important railroads. Express trains maintain a speed of fifty miles an hour, and almost any part of Great Britain can be reached in twelve hours. Ireland is reached by train to Holyhead, on a small island off the coast of Wales, and thence by ferry to Dublin. The mainland of Europe may be reached by ferry from New Haven across the English Channel to Dieppe; or from Dover to Calais, across the Strait of Dover; or from Dover to Ostend, in Belgium, on the North Sea.

The exports of England are manufactured products, and can be found in every country in the world. Its imports are chiefly raw material and foodstuffs from the colonies, the United States and South America.

Cities. No other country has so many large cities in comparison to its size as has Great Britain. Although the United States has more large cities, its area is much greater in proportion. London is about as large as New York, but Glasgow, Scotland, the second city in Great Britain, is not half as large as Chicago.



The Mansion House, the Official Residence of the Lord Mayor of London.

LONDON, the capital of the British Empire, is the chief city in the Old World in size, manufacturing and commercial importance. It is situated in the interior of England and yet, being on the broad estuary of the River Thames, it is in direct communication with the ocean. Railways ra-



The Bank of England. The building has no windows. About one thousand persons are employed there.

diate in all directions, and steamers from all parts of the world dock there. It is principally a receiving port; that is, goods are reshipped thence to the interior of Great Britain or to other parts of the world. The commerce of London and other English ports is increased by vast quantities of wares brought there from the countries where they are produced, and reshipped, either at once or after being stored for a time in warehouses. The wealth and trade of London are so extensive that it is a money center second only to New York. The Bank of England transacts government business and controls enterprises in Africa, Asia, South America and Australia.

Though there is much traffic, London is a quiet city. Perhaps this is because the pavements are made of asphalt or of wood, and because of the absence of trolley or cable cars, for which the streets are too narrow. Instead, omnibuses, cabs and the underground railway are used. London Bridge is the principal bridge for traffic, and marks the head of navigation for seagoing vessels.

The Tower of London was the prison and place of execution for criminals and traitors.



The Tower of London.

West End is the fashionable part of London. Here the streets are broad, and lined with beautiful buildings. Regent Street, Oxford Street, Piccadilly and Rotten Row, a noted driveway in Hyde Park, are the most frequented thoroughfares. Westminster Palace, on the Thames, occupies twice as much ground as the Capitol at Washington. Here the British Parliament convenes to enact laws for the United Kingdom and such parts of the empire as are not self-governing. Westminster Abbey contains statues and memorials of English monarchs, heroes,

scientists and literary men. In the Poets' Corner is a bust of the American, Longfellow, whose works are very popular in England.



Westminster Abbey.

The British Museum is another of London's famous buildings. It contains collections of great value to scholars. Here is the Rosetta Stone, which gave the clew to the language of the ancient Egyptians, and the Elgin marbles, the finest existing collection of sculpture, including the frieze stripped from the Parthenon at Athens. The British Museum has a great library of more than two million volumes.

Just below London is the Greenwich astronomical observatory. The meridian that passes through Greenwich is the prime meridian.

LIVERPOOL. The growth of Liverpool is associated with the settlement and development of North America. As London controls the trade with the continent of Europe and with the Far East, so Liverpool, because of its loca-

tion, is the chief port in the American trade. It is now the fourth city in size in the United Kingdom, and ranks next to London in commercial importance. Great cargoes of manufactured goods are sent to the United States and other countries from Liverpool, and cotton, meat and wheat are received there from American ports. Liverpool



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Cotton Exchange, Liverpool, England.

is the greatest market for cotton in the world, and most of the cotton comes from our Southern States.

MANCHESTER. The coal fields and the Manchester Ship Canal have made Manchester the fifth city in size in Great Britain. The moist climate of western England permits the handling of cotton fiber, and Manchester is the center of cotton manufacture. The Manchester Canal connects Manchester with the estuary of the Mersey River. It is about thirty-five miles long and nearly twice as wide as the Suez Canal. As ocean steamships can unload at Manchester, this city has become, like Liverpool, a great cotton market.

The adjacent city of SALFORD is engaged in the manu-



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Manchester Ship Canal.

facture of cotton, iron, and chemicals. It owes much of its prosperity to its location, being on the Manchester Ship Canal.

BIRMINGHAM is larger than any other city in Great Britain except London and Glasgow. On account of its access to the iron and coal fields it is the metal emporium of England. Gold, silver, brass, iron and steel are wrought into articles of ornament and utility. Jewelry and firearms, toys and all sorts of hardware and machinery, are products of its shops and foundries.

SHEFFIELD, in central England, is noted for its cutlery. Silver-plating was invented here, and is an important industry.

LEEDS and BRADFORD, in the interior, northeast of Manchester, are important seats of woolen manufactures.

LEICESTER, on the site of an old Roman camp, is engaged in the manufacture of boots and shoes and hosiery.

STOKE-ON-TRENT is a great pottery town. Every variety of china and earthenware is made there.

NOTTINGHAM, on the River Trent, manufactures cotton and silk. Much lace is made there.

HULL is on the Humber River, a great estuary on the eastern coast. It exports the products of Nottingham and the other cities of the interior, chiefly to the coun-

tries on the west coast of the continent. Many fishing vessels find harbor there.

NEWCASTLE is the shipping port for the great coal fields of northeastern England. "Carrying coals to Newcastle" is a needless task. Coal is sent thence to ports on the mainland of Europe.

BRISTOL, near the mouth of the Severn, is an important seaport and railway terminus in the southwestern part of England. It ranks next to Liverpool in its trade with America.

PORTRSMOUTH, on the southeastern coast, is the site of the chief navy yard of the country.

SOUTHAMPTON, an important port for transatlantic liners, is near by.

WEST HAM is a populous suburb of London.

BRIGHTON, in the south, on the English Channel, is the principal sea-side resort in England, and is frequented by throngs of excursionists.



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Shakespeare Memorial Theater, Stratford-on-Avon, England.

England, as the mother country of the English-speaking people, has many landmarks with historic or literary associations. Of these, perhaps none is of greater interest than Stratford-on-Avon, the birthplace of William Shakespeare, the greatest English poet.



*Copyright, by Underwood & Underwood.
Stonehenge.*

There are monuments of prehistoric inhabitants at Stonehenge (between Bristol and Southampton). Evidences of the Roman occupation are found at Chester and elsewhere in the walls and pavements that mark the sites of fortified camps.

The achievements of the English people are closely connected with their great schools and universities. Rugby, Eton and Harrow are famous public schools, where English youth are prepared for the universities. Oxford and Cambridge in England, Edinburgh in Scotland, and Dublin in Ireland, are the sites of great universities, whose graduates have achieved eminence in all arts and sciences, and as soldiers and statesmen have made England the leading nation of the world.



Part of the ancient Roman wall, Chester, England.

Questions

1. What island lies near the south coast of England?
2. Where are the Scilly Islands?
3. Upon what river is Stratford situated?
4. In what direction does it flow? Into what water?
5. In what direction is the Thames River from the Avon?
6. In what direction does the Thames flow? Into what water?
7. What university town is on the Thames?

WALES

Wales is in the western part of Great Britain, projecting into the waters that lie between Great Britain and Ireland. The Irish Sea lies north, Bristol Channel is south, and on the west Cardigan Bay, a widening of St. Georges Channel, indents the coast.

Wales is almost as large as New Jersey, but is not nearly so populous. The surface is chiefly highland, the Cam-

brian Mountains extending through the middle of the country. Snowdon, 3,751 feet high, is the highest peak.

Mining is the most important industry, and coal is the chief mineral, iron ranking next in importance. Great numbers of sheep and some cattle graze on the hillsides.



Scene in Wales. The mountain in the distance is Snowdon.

CARDIFF is the chief city, and the world's principal port for the export of coal.

The Welsh are a sturdy race. They were conquered by the English kings only after centuries of warfare. Their folk songs have high merit, and the people sing them well. About half the inhabitants of Wales speak the ancient Welsh language, but English is the principal language, and is spoken by many who speak Welsh.

In matters of government, Wales is treated as part of England. The heir apparent to the British throne bears the title of Prince of Wales.

SCOTLAND

People. To the north of England lies Scotland, the home of a pious, thrifty, well-educated people.

The Scotch come from two distinct branches of the

Caucasian race, the Teutons and the Celts, lowlanders and highlanders.

The ancient highland costume of the men is picturesque. This costume is now worn principally by the soldiers of certain Scottish regiments.



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British soldiers wearing Highland costume.

The Scotch are logical thinkers, and honest, blunt and canny. They are self-contained, but do not lack humor.

Surface. Because of the sinking of the land, the coast of Scotland is deeply indented. This is true especially of the west coast, a strange collection of mountains, firths and rocky isles. The islands are the peaks of ancient mountains which have sunk into the ocean, and the deep firths are submerged valleys, like those of Maine, in the United States, and those of British Columbia and Chile. This characteristic of the west coast has greatly encouraged trade with the United States, and the growth of Glasgow is to be in part attributed to it.

Northern and central Scotland consist of rugged highlands, with here and there flat areas known as moors, lonesome, silent, desolate places, yet beautifully overgrown with purple heather. Another feature of Scottish scenery is its lakes. The largest, Loch Lomond, in the



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Loch Lomond, Scotland.

west-central highlands, is a beautiful sheet of silvery water, with here and there scraggy rocks protruding, and the whole surrounded with mountains clothed in the royal purple of the heather. Loch Katrine, another beautiful lake near Lomond, is mentioned by Scott in "The Lady of the Lake."

Some of the peaks, especially in the central highlands, attain a considerable height. Ben (head) Nevis, in the Grampians, is over four thousand feet high.

The southern highlands slope gently toward the northwest, thus forming the fertile central lowlands, where most of the Scotch people live.

The Clyde, Scotland's most important river, flows through the central lowland. On its banks are prosperous farms and gardens with beautiful flowers. The Scotch are skilled gardeners. At its mouth the Clyde puts on business clothes. The banks and water front show great ships in various stages of construction, and

the noise of hammer and steel is deafening. The Clyde was not always so; the enterprising people of Glasgow had to dredge a channel for ocean steamers in the river from the mouth of the Clyde to the city, in order to promote commerce and further their industries.



A bridge over the Clyde River, Glasgow, Scotland.

Cities. GLASGOW is Scotland's greatest commercial and industrial center, shipbuilding being the most important industry. More ships are launched upon the River Clyde than upon any other water in the world. The busy streets of Glasgow are well paved, and the houses are built of granite and sandstone, local minerals. Street cars are owned and run by the city, and such low rates of fare are asked that no profit is made. Public baths and houses at low rents are provided by the city.

On the Ayr, a small river which flows into the Firth of Clyde, can be seen the birthplace and home of Robert Burns, the famous poet.

EDINBURGH, on the Firth of Forth, is the center of culture and learning. It publishes almost as many books and maps as London. The University of Edinburgh has students from all parts of Great Britain. The cathedral



The Castle, Edinburgh, Scotland.

where John Knox, the reformer, preached, is visited by many tourists. On a high rock, about three hundred feet above sea level, is located the Castle of Edinburgh, a former home of Scottish kings.

ABBOTSFORD, on the Tweed, was the home of Sir Walter Scott, the great novelist and poet.

Products and Pursuits. Scotland is colder than England, and the rainfall is abundant. Only one fourth of Scotland is fertile. The chief products are the hardy grains. Barley and wheat are widely grown, but by far the most important crop is oats, the moist climate being favorable to the growth of this cereal. Oatmeal constitutes a large part of the diet of the Scotch people.

Coal and iron are mined in the central lowlands, and cotton, woolen, linen, jute and hardware factories are numerous.

Foodstuffs and tobacco are obtained from the United States.

Questions

1. Name the Channel Islands. In what direction are they from Great Britain? What is the nearest coast?
2. What and where is Flamborough Head?

3. Where is the Firth of Forth? For what is it noted?
4. Where is Queenstown?
5. Where is Fishguard?
6. Why are they well located as ports for transatlantic liners?

Exercise

Trace a voyage circumnavigating Great Britain. Make a list, in order, of the waters through which you pass.

IRELAND

Surface. Ireland is the most western land of Europe, except Iceland. As Great Britain was once a part of the mainland, so Ireland, now separated by narrow and shallow channels and seas, was once joined to the shores of Great Britain. It consists of a low plain, or basin, surrounded by broken mountains. There are many glacial hills called drumlins. Because of glacial deposits, many of the streams are obstructed, and numerous bogs are formed. These are stretches of wet, spongy land where the soil is composed chiefly of decayed vegetation. In such places peat is found. Peat is a kind of coal in its first stage of formation. When dried and pressed into blocks, it is extensively used as fuel. The basin of the beautiful Lakes of Killarney, in southwestern Ireland, was formed in the same way as the bogs, being dammed up by rocks and earth dropped from melting glaciers.

On the northern coast of Ireland is the Giant's Causeway, a flat, rocky promontory, consisting of three mountain tongues sloping toward the sea. It is formed of many-sided natural columns of a greenish-black stone, called basalt, fitted very closely together in different lengths. A similar rock formation is found on a small island off the coast of Scotland, and a famous grotto there is called Fingal's Cave.

Climate. Ireland, being the first country of Europe to receive the westerlies from the Atlantic, has a very



The Upper Lake, Killarney, Ireland.

equable climate. There is so much rain that grass in Ireland is always green, and hence Ireland is often called "The Emerald Isle."

People and Industries. Although the population of Ireland is only half as great as it was before the famine of 1846, the island is almost as well peopled as Scotland. Great numbers have emigrated, especially to the United States. Politically, Ireland consists of two parts: the Irish Free State, which includes most of the island, and Northern Ireland. Northern Ireland is ruled by the British Parliament; the Irish Free State is a self-governing nation, like Canada and Australia.

Farming and stock raising are the principal industries. Oats, flax and potatoes are raised.

There are no important mineral deposits in Ireland. Turf or peat is used for fuel.

Cities. BELFAST, only thirty miles from the western shore of Scotland, imports coal, and has become the

greatest linen manufacturing center in the world. This is largely because the spring water in the vicinity is excellent for bleaching. Belfast has large shipyards where ocean liners are built.



Sackville Street, Dublin, Ireland. The statue commemorates Daniel O'Connell, the Irish orator.

DUBLIN, the capital, is a beautiful city. Exquisite lace is made there by women, many of whom do this work in the streets. Dublin has magnificent homes, public buildings, fine parks and statuary, and good schools. It is the seat of Trinity College, which was founded by Queen Elizabeth, and which is the leading university of Ireland.

CORK is the most important city of southern Ireland, shipping large quantities of meat, live stock and sweet or unsalted butter. Near Cork is Queenstown, the first port reached by steamers from America. The ruins of the famous Blarney Castle are not far from Cork. Nothing but the dungeon tower remains.

Though poor, the Irish are a happy people, seldom depressed. They are brave, kind-hearted, generous and quick-witted.

Questions

1. What port is located about $1^{\circ} 30' W.$, $55^{\circ} N.$?
2. What is the approximate latitude and longitude of Lands End? Of the Lakes of Killarney?
3. Where is Holyhead? How far from Dublin?

Exercises

1. Make a list of six inland cities of England, and state for what each is noted.
2. Make a list of ports on the west coast of Great Britain, and state what each exports.
3. Make a list of ports on the east coast of Great Britain, and state the chief import or export of each.
4. Make a sketch map of the world, and indicate the best sea routes from London to Montreal, New York, Rio de Janeiro, Bombay, Hongkong, Sydney, Amsterdam.
5. Write a full account of England.
6. Write all you know of Wales, of Scotland, of Ireland.

The ladder leading over the battlements enables an intrepid visitor to kiss the Blarney Stone.



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Blarney Castle, Ireland.



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The Palace of the Louvre, Paris. The greatest art gallery in the world.

CHAPTER IV

FRANCE

France, one of the World Powers, has at different periods in the past ranked first among European nations. It is now surpassed by Great Britain in wealth,

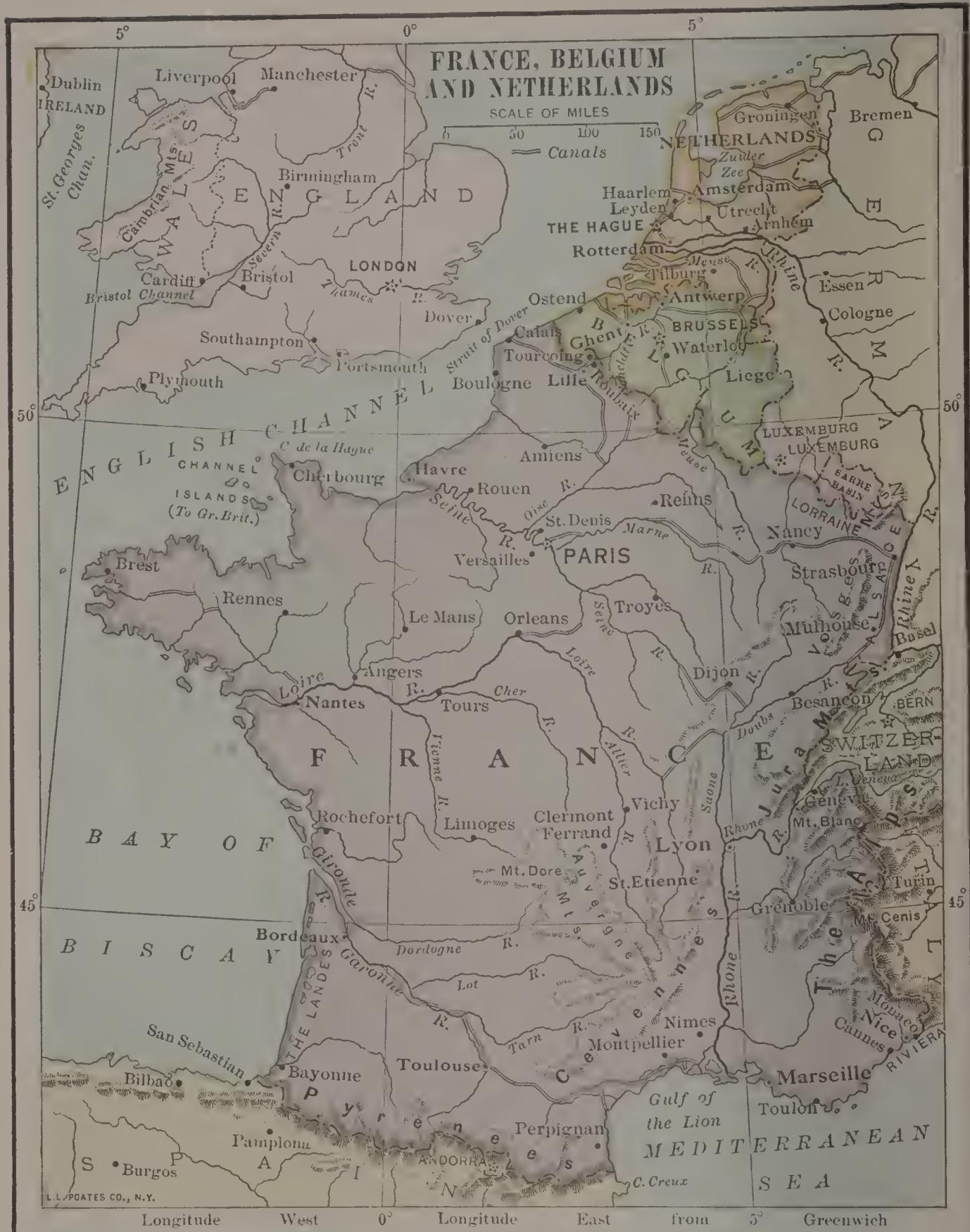
The Eiffel Tower 984 feet high, is the highest structure in the world. Elevators carry visitors to the platform near the top, which will hold many persons. At the top are a weather observatory and a wireless station.



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Eiffel Tower, Paris.

manufacture and commerce. It is but little farther from the United States than is Great Britain, and great ocean liners sail weekly between New York and Havre.

Location. France is located in southwestern Europe, with the sea on three sides, and has mountain ramparts



as important parts of its land boundaries. It is the principal country on the Mediterranean Sea; it is bordered by Belgium, Germany, Switzerland, Italy and Spain; it is within easy reach of Great Britain and northern Africa, and it has access through the Mediterranean to the Orient, and over the Atlantic to America and western Africa.

Questions

(Turn to the maps, pages 6 and 14.)

1. Which part, and how much, of France is in the same latitude as the southern coast of England?
2. What effect would you expect the location of France to have on its climate? On its productions?
3. What country adjoins the lowlands of France?
4. What countries are on the eastern border of France?
5. Into how many sections may the coast of France be divided?
6. What waters wash each?
7. What are the limits of France in latitude and longitude?
8. What State on the Atlantic coast of our country is in the same latitude as the Mediterranean coast of France?
9. Is France chiefly highland or lowland?
10. Into how many sections are the highlands of France divided by the Rhone Valley?
11. What mountains are west of the Rhone Valley and nearest to it?
12. What mountains still farther west?

Size and Population. Although France is smaller than Texas, it is the largest country in Europe, next to Russia. Its population is nearly equal to that of Great Britain. France has possessions in Africa, Asia, the Pacific islands, South America and the West Indies. The most important are in Africa : Algeria, Morocco and Tunis. French influence predominates throughout the western parts of the Sahara Desert and of the Sudan, as well as in much of the interior of Africa as far south as the Kongo River. These dependencies are almost twenty-five times as large as France itself. Madagascar belongs to France, as do two small islands, valuable as a basis for fishing rights, near Newfoundland.

Surface. The loftiest highlands of France are the Alps, in the southeast, whose highest peak is Mt. Blanc. To the

westward are the Cevennes and Auvergne mountains, upon the central plateau of France. They abound in hot mineral springs and contain many extinct volcanoes. Between France and Spain are the Pyrenees Mountains,



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Vineyards and fields in northeastern France.

which in places reach an altitude of over 11,000 feet, and have few passes, and those very high. The approach is abrupt from the southern side, but the northern slopes are gradual, often wooded, and inclose beautiful valleys. Three fourths of France is a rolling plain, which slopes toward the Bay of Biscay. The Landes are a sandy plain about one hundred twenty miles long in the southwestern part of France. They have many dunes and marshes, and much of the plain is covered with pine forests.

Drainage. The Rhone, the Seine and the Loire are the principal rivers. The Seine and the Loire rise in the central plateau and flow gently toward the north and the west into the Atlantic Ocean. The Rhone River flows southward, in the valley between the Alps and the Cevennes, and discharges into the Mediterranean Sea. The rivers are navigable far inland, and in connection with canals afford excellent transportation to every section.

The Rhone may be called the twin of the Rhine, though not so beautiful. The glaciers of Mt. St. Gotthard give rise to both rivers. The Rhine flows through Lake Constance, thence through a valley rich in vines, and at its mouth forms a delta. The Rhone flows through Lake Geneva, and has vine-clad banks and a delta.



Lake Geneva. The towered building is the Castle of Chillon, famous as the prison of Bonnivard, a Swiss patriot.

The Rhone and the Loire are highways of commerce from the sea to central Europe. The Seine is a narrow, shallow river. One of its branches is the Marne, famous for battles in the World War.



Monaco, on the Riviera, the capital of the principality of Monaco.

Climate. The westerlies blow unhindered over France, tempering the climate and dropping moisture. The Pyrenees condense the moisture of the winds that reach their summits, and their northern slope, near the Atlantic, has heavier rains than any other part of France. Southeastern France, influenced by the winds which bring warmth from the Sahara in Africa and moisture from the Mediterranean, has a subtropical climate. The driest section is in the extreme southeast, where the Mediterranean coast, known as the Riviera, has many cities which are fashionable winter resorts. The winter weather in the Rhone Valley to the west of the Riviera is sometimes unpleasant when the mistral, a cold, dry land breeze, blows from the northwest and causes damage and discomfort.

Products. France leads the world in the production of grapes. The vine flourishes from the Loire Valley southward and along the Rhone River. Along the Mediterranean coast there are groves of olive, orange, lemon, pomegranate and mulberry trees. The mulberry tree is cultivated for its leaves, upon which the silkworms feed.

Central France is a great grain and sugar beet country. It ranks in Europe next to Russia in the production of wheat. Much former grain land is now given over to the cultivation of the sugar beet, and France imports large quantities of wheat from abroad. Millions of sheep and cattle browse on the foothills of the Cevennes and Pyrenees. On the broad sandy Landes of the Bay of Biscay hogs are raised. Horses are carefully reared. Percheron horses, noted for their large size, have been extensively exported to the United States.

Compared with England, France is poor in minerals. Much coal and iron, however, are mined in the north and northeast, and near the Rhone; and the rich mines of the Sarre Basin, taken from Germany and governed by the League of Nations, now belong to France.

Industries. Half of the French population is engaged in agriculture and stock raising. Different kinds of fine cheese, such as Roquefort and Brie, are made.

The fisheries of France are a source of great wealth. The Bay of Biscay, the English Channel and the Mediterranean abound in cod, oysters and sardines. The largest sardine canneries are on the Bay of Biscay.



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Drying sardines, France.

Manufacturing is next in importance to agriculture. Coal is transported by means of canals, and in the eastern highlands water power is extensively employed. The manufactures of France, owing to the artistic skill and taste of its people, excel in design and quality those of any other country.

Silk is the leading manufacture of France. Fine woolens, beautiful tapestries, dainty laces, well-cut gloves,



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Weaving the Gobelin tapestry, Paris. The weavers behind the loom, whose hands show as they work, watch the results in a mirror.

exquisite jewelry, hats and gowns, all kinds of leather goods and china, artistically designed and decorated, are made in the homes and in the great factories.

Wine is manufactured extensively, not only for domestic consumption but for export. Olive oil is extracted from the olive, which grows freely in groves in the south of France.



In a French silk mill.

Commerce. France is well located for commerce, but does not have many good harbors. Partly on this account the French do not own enough ships to carry their goods; they depend largely upon the merchant marine of Norway and Great Britain. France has a great variety of manufactures, but they are largely of the nature of luxuries, and therefore not bulky; hence France takes a smaller part by tonnage in the world's commerce than might be expected. Her imports are coal, wool, cotton, raw silk, oil and foodstuffs. Her exports are silk, woolen and cotton textiles, wine, jewelry and wearing apparel for ladies. The United States sends France raw cotton, meat and grain, for which France sends us manufactures.

France has a magnificent system of roads and canals, which has greatly facilitated transport of materials. Many of these roads were built by the Romans.

France has many railroads, which radiate from Paris to every section of the republic. Fast trains connect Paris with Berlin and Warsaw. The journey from Paris to London by way of Calais and Dover, across the Strait, takes but seven hours. Italy is reached through the Simplon, the St. Gotthard or the Mt. Cenis tunnel; Vienna and Constantinople by way of Strasbourg and Munich, across southern Germany. Madrid and the cities of Spain are reached by railways which round the extremities of the Pyrenees.

From Havre and Cherbourg transatlantic liners sail to the United States. Marseille is the principal Mediterranean port and clears many vessels for the ports of South American countries. There are lines from Bordeaux to South America and to the Orient.



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The Seine River, Paris. Notre Dame is located on the island in the river.

Cities. PARIS is the largest city on the mainland of Europe, and ranks third in size among the cities of the world, being surpassed only by London and New York. In the midst of a productive region, on a navigable river, and in direct communication with all the great countries of Europe, Paris has become an important manufacturing

and commercial center. The finest gowns, gloves, perfumery and porcelains come from Paris, and the fashions of the civilized world originate there.



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The Grand Boulevard, Paris. Flushing the streets.

Paris is said to be the most beautiful city of the world. The winding Seine, spanned by many low stone bridges, helps to beautify the city. The streets in the modern part of the city are broad and kept scrupulously clean. Some walks for pedestrians are as broad as the roadways of our streets. Twice daily the streets are flushed, and street cleaners are busy all day. The houses, frequently of five stories, are built close to the walks, and are of uniform height and color. There is a law that new houses shall conform in style to those they adjoin. Because of this law no beautiful building can be marred by an ugly neighbor.

Great tubes, similar to railroad tunnels, or subway tubes, are used as sewers. There are walks on both sides, and the stream of water carrying the refuse of Paris is of such tremendous force and volume that there is no offensive odor.

The Champs Elysées is the grandest avenue in Paris. Great trees shade the walks. Many of the residents who



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Avenue des Champs Elysées (Elysian Fields), Paris. It extends for over a mile from the Place de la Concorde.

live in private houses along the avenue are Americans or English. The Arc de Triomphe, at the end of the Champs Elysées, is a wonder in sculpture. It commemorates the victories of Napoleon, the greatest general of modern times. From this arch the twelve most fashionable avenues of Paris radiate.

The Museum of the Louvre is the most famous art gallery in the world. It extends along the Seine River for about half a mile. It contains more originals in sculp-



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Statuary in the Louvre, Paris. The Hall of the Caryatides.

ture and painting than does any other museum. It contains the celebrated Venus of Milo.

The Cathedral of Notre Dame is noted for the sculptures which ornament its portals, towers and columns. The great Napoleon was crowned in this church, and his little son was christened there.

The Panthéon is an ancient church, where many noted Frenchmen are buried. The mural paintings represent paradise, purgatory and the infernal regions, as described by the great Italian poet Dante.

The Hotel des Invalides is a home for old soldiers. In the church connected with this institution, in a circular crypt beneath the dome, rests the sarcophagus containing the remains of the great Napoleon.

Napoleon Bonaparte was born on the island of Corsica, entered the French army, and made himself its commander and the ruler of France. Under his leadership

France became the chief country of Europe. He was defeated in 1815 at Waterloo, Belgium, by the English and their allies, under the Duke of Wellington, the "Iron Duke." After this defeat, Napoleon was banished to the island of St. Helena, off the Atlantic coast of Africa, where he remained an exile until his death.



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Cathedral of Notre Dame, on an island in Paris.

LYON is the leading city of the world for silks and velvets. It owes its importance to the possession of superior water for dyeing. For centuries silk was woven on hand looms, all members of a family joining in the labor to produce the finished article. Early in the nineteenth century Jacquard invented the loom which bears his name. By its use the most elaborate patterns are as readily and

cheaply woven as plain goods. The nearness of Lyon to coal fields, and its position on the Rhone, which furnishes water power, contribute to the progress of the silk industry. So much silk is manufactured that in addition to what the native silkworms furnish, raw silk is imported from Italy, Switzerland, China and Japan.

HAVRE is the seaport of Paris. It receives goods from the United States and Great Britain to be reshipped to other parts of Europe. The raw cotton which it receives from the United States is chiefly distributed to the cotton manufacturing towns of France.



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The harbor, Marseille, France.*

MARSEILLE is the greatest French port. Its docks are among the finest in the world. It is the outlet for the products of the rich Rhone Valley, and it receives imports from Africa and the Orient. Marseille is one of the greatest coffee ports of the world.

BORDEAUX, on the estuary of the Garonne River, is the chief port for the shipment of wines, and has an important trade with South America.

STRASBOURG, on the Rhine, is the chief city of Alsace-Lorraine, a large district which was taken from France in 1871 but restored after the World War.



Europe. Distribution of manufacture.

LILLE, a large manufacturing town in the north of France, is engaged in textile industries, and makes linen, cotton, woolen and other fabrics.

ST. ETIENNE, in the Rhone Valley, ranks next to Lyon in the silk industry and, like the larger city, has excellent water for dyeing. It manufactures ribbons. Coal is abundant in the highlands of the vicinity and is sent to many cities in southern France. Steel and firearms also are made in St. Etienne.

LIMOGES is noted for its fine porcelain.

Questions

1. Name the three principal seaports of France.
2. On which section of the coast is each?
3. Which are at the mouths of great rivers?
4. Name a city on the Rhine, and tell something of its history.
5. What is the chief city in the highland region of France?
6. What other large city is near by? Is it on the right or the left bank of the Rhone?
7. In what respect are the industries of these two cities alike?
8. Why is their nearness to Italy an advantage?

Government. France is a republic. The President is elected for seven years, by the majority vote of the Senate and Chamber of Deputies, the two branches of the French Legislature which correspond to the Senate and House of Representatives in the Congress of the United States.

People. The French are an intelligent people, gifted in art and literature. They are polite, courageous and impulsive. The laborers and peasants are distinguished by the sabot or wooden shoe, worn by both sexes, and by the blouse worn by the men and boys. In Paris and other cities, horse flesh, sold in shops where no other meat is permitted on sale, is used for food by the poorer people. French peasants are devoted to their families, are very thrifty, and their savings are well invested.

Education is general in France, and the schools are well organized. The principles of good behavior are taught in the schools. Technical and scientific education is highly developed, and its influence appears in the great scientific and engineering achievements and artistic productiveness of the French. The Suez Canal, which joins the Mediterranean Sea with the Red Sea, was dug by a French engineer, who also began the construction of

the Panama Canal, but was forced to abandon it. The French are among the leaders in experiments with air-ships and flying machines. Most of the great modern artists have studied in France. The statue of Liberty Enlightening the World, which greets every vessel that enters New York harbor, is the work of a French artist. The statue was presented to our country by the French people. Charlemagne (Charles the Great), the emperor who introduced education into France, and Joan of Arc, the inspired and patriotic Maid of Orleans, who led an army against English invaders, are but two of the many great names in French history.

Exercises

Imagine that you are spending a week in Paris. Which public building would you prefer to visit? Why?

Write as complete an account of France as you can.



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The sarcophagus of Napoleon Bonaparte, Paris.

CHAPTER V

ITALY

Italy was long ago the seat of the world's greatest empire. It is famous for its bright blue skies and deep blue rivers and lakes. Man has helped nature to make Italy attractive, with artistic buildings, paintings and sculpture.

Size. Italy is about twice the size of New York State,



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Monument to Columbus, Genoa, Italy. The mountains approach so close to the sea that the city rises in terraces from the shore.



but nearly four times as many people live in it. Next to Belgium, England and the Netherlands, it is the most densely populated country of Europe.

Sicily and Sardinia are islands in the Mediterranean belonging to Italy.

Sicily is larger than any New England State except Maine. In remote ages it was joined to both Europe and Africa. Its position midway between Italy and Africa,

and between Asia Minor and the Strait of Gibraltar, has made it many times the battleground of contending races. Its highest point is the volcano, Mt. Etna.

Sardinia lies about 150 miles west of Italy. Sardines derive their name from this island.

In shape Italy resembles a large boot projecting from south central Europe. The coast is deeply indented, forming many fine harbors.

Questions

1. What States on the Pacific coast of the United States are in the same latitude as Italy?
2. What States on the Atlantic coast?
3. What countries border on Italy?
4. What is the nature of the boundaries between them and Italy?
5. What large islands belong to Italy?

Surface. The western Alps curve to the south and then to the east, joining the Apennines. The Apennines ex-



An Italian villa ruined by earthquake during an eruption of Mt. Vesuvius.

tend to the extreme south of Italy, forming a ridge along the middle of the peninsula. Southern Italy is the center of the volcanic eruptions and earthquakes which characterize the Mediterranean countries. Mt. Vesuvius on the mainland, Mt. Etna in Sicily, and Stromboli near Sicily, are noted active volcanoes.

Inclosed by the Alps and the Apennines is the fertile basin of the Po River. The rising of the land delivered it from the sea, and the silt brought by the streams built it up to its present level. The Po brings down so much sediment that it has deposited a great delta. The delta is low land, and part of it is protected from overflow by dikes. The great plain of the Po basin is the only important lowland of Italy. Though droughts frequently occur during the summer, Italy never suffers from need of water, for its lakes act as reservoirs, and it has an excellent system of irrigation.



Lake Como, Italy.

Maggiore, Lugano and Como are lakes in the north, frequented by tourists because of the beautiful surrounding scenery and the deep blue of the waters.

Climate. The Po basin receives cool winds from the snow-covered Alps, hence it is temperate. The peninsular portion of Italy is warm because of the Mediterranean winds.

The westerly winds deposit a moderate amount of rainfall over the northern part of Italy.

The peninsular part of Italy has a rainy and a dry season. In winter the horse latitudes, with their rainless weather, are south of Italy. At that season the westerlies bring rain, which is condensed by the Apennines, and falls upon the slopes of this central ridge. But with the advance of the sun northward the horse latitudes extend over southern Italy, which is then subject to droughts.

Some sections of Italy, especially in the south, are subject to malaria, and on this account are uninhabitable. The eucalyptus, or blue gum, a majestic tree found in Australia, valued for its timber, has been widely planted to absorb the standing water which breeds the malaria-producing mosquito.

The northwestern coast in the neighborhood of Genoa is part of the Riviera and has a delightful climate.

Products. It is not surprising that Italy has a dense population, for it is rich in products. In northern Italy there are great fields of rice, flax, hemp, grain and hay. Farther south there are luxuriant groves of oranges, lemons, olives and chestnuts. The cypress, pine and live oak are characteristic trees. The soil and climate are so favorable that two or three crops of vegetables and hay are gathered each year, largely by the aid of irrigation.

On the western slopes of the Apennines there are vineyards almost equal to those of France. Italy ranks second to France in the production of wine. Large numbers of mulberry trees are cultivated in western Italy, and silkworms are fed upon their leaves. Italy's output of raw silk is next to that of China and Japan.

From the warm waters of the Mediterranean and the Adriatic the Italians secure sponges and coral, as well as tunnies and sardines.



Mt. Etna, Sicily.

Sulphur is procured from the volcanoes, principally from the vicinity of Mount Etna in Sicily. No other country in the world produces so much sulphur. Marble is mined in Carrara. The Carrara marble, on account of its fine grain, is considered the most beautiful in the world, and is preferred for statuary. Quicksilver, iron and borax are also found.

Questions

1. Between what mountain ranges is the valley of the Po River?
2. Which range lies north of this valley? In what direction does it extend?
3. Which range is south of the Po? In what direction does it extend?
4. What volcanoes are in Italy?
5. Where is each located?

Industries. Farming is the principal pursuit of the Italians. Cattle, goats and sheep are reared.

Thousands of children gather mulberry leaves for a few pennies a day. The leaves are placed upon trays, where the silkworms feed upon them. When the silkworm has its growth it spins a cocoon. The cocoons are steamed to kill the chrysalis, and are then placed in hot soapy water to loosen the fibers from the gum. Then the fibers are spun and constitute raw silk.

Though the coal mines in Italy produce low grade fuel, there is considerable manufacturing. Much use is made of water power, not only for the direct operation of mill wheels, as was the custom even before the discovery of the steam engine, but also to develop electricity, which can be conveyed by wires for long distances and used to run electric motors, which in turn operate machinery. The principal manufacture is silk.

The olive oil of Italy is considered the best in the world, and Italian wines rank in quality next to those of France.

Macaroni and cheese, much of the latter made from goats' milk, are two important food products. They are cheap, and large quantities are consumed. Large quantities also are exported.

The beautiful country, the noble history, and the treasures of art bequeathed from the ancient Roman Empire and from the great sculptors, painters and architects of the Middle Ages, provide for the Italian people an education in art and good taste which reflects itself in their character and in many of their manufactured products.

Their glassware, mosaics and marbles and their wood and coral carvings are highly artistic.

Commerce. Italy is rich in good harbors, and carries on trade with all Mediterranean countries. Her favorable position, midway between the Atlantic Ocean and Asia, made Italy of old a great commercial and maritime nation. Venice was then the center of the trade between

Europe and the Orient. In the days of Columbus the sailors and sea captains of the great Italian ports commanded the ships which the monarchs of other nations fitted out to explore the unknown sections of the world. But nations more powerful, and better situated for the world's trade, long ago outstripped her. Since the opening of the Suez Canal and of the Alpine tunnels her condition has improved.



The Tiber River at Rome. The dome of St. Peter's appears in the distance, and the Castle of St. Angelo at the right.

The great steamship companies have made use of Italy's natural advantages as a maritime country. At Brindisi on the Adriatic Sea the noted British company called the "P. & O." (Peninsular and Oriental) transfers the mails from railway trains to vessels sailing to India, China and Australia. Other British companies have lines from Naples to America and to Asia. There are Italian lines from Genoa to the same quarters.

The acquisition of the great seaport Trieste after the

World War has added much to the sea-borne commerce of Italy.

Through the passes and tunnels of Mt. Cenis, St. Gott-hard and the Simplon, raw silk, hemp, flax, marble, sul-phur, and rice are shipped by railroad to Germany, Great Britain, France and other European nations. Italy has an important trade with Argentina. Italy's imports are wheat, coal, raw cotton and machinery. To the United States Italy sends silks, cheese and works of art. We send to Italy wheat, raw cotton, and kerosene oil.

Cities. ROME, the capital, is built on seven hills, overlooking the Tiber, the principal river west of the Apen-nines. Mainly because it had lost its political importance, and doubtless also because of malaria, Rome, which in its ancient grandeur had a million or more people, de-clined to a quarter of that number. But since it became the capital of modern Italy, it has almost trebled its popu-lation, having now nearly three quarters of a million in-



The Rotto Bridge, Rome. It replaced the bridge which Horatius is fabled to have defended, and is now replaced by the modern bridge beside it.

habitants, and bids fair to justify the name "The Eternal City," by which it is known. The city is built on both sides of the river, which is spanned by twelve modern bridges.

The glory of modern Rome is St. Peter's, the largest cathedral in the world. It was over one hundred fifty years in building, and many architects in turn designed



St. Peter's Cathedral, Rome. The building at the right is the Vatican.

different parts. The dome was planned by the great sculptor, painter and architect, Michael Angelo.

The piazza, with a colonnade of magnificently carved columns encircling monuments and beautiful fountains, is one of the stateliest spots in Rome.

Adjoining the cathedral is the Vatican, the home of the Pope, a palace containing four thousand rooms filled with art treasures.

Part of the modern city was built over ruins of ancient Rome, which had become covered with earth during the passage of the centuries. As people became more inter-



Ruins of the Roman Forum.

ested in the history of Rome many ancient ruins were uncovered, and the excavations still continue.

The Forum is a comparatively narrow public square of the ancient city, about which many of the most important buildings were clustered. It was the center of the municipal life of ancient Rome. It was a place of assembly on public occasions and was ornamented by columns and statues in honor of distinguished Romans.

The Coliseum, the great pleasure amphitheater of ancient Rome, whose arches are now half crumbled away, ivy-grown and desolate, was formerly the scene of gigantic shows. Forty thousand Romans could be seated on the tiers of stone benches, from which they could see all the spectacles in the sandy arena. It was here that four-horse chariots raced madly and trained gladiators fought to the death and hundreds of Christian martyrs were rent to pieces by wild beasts.

The Catacombs are a network of tunnels, hundreds of miles long, just outside the city. They were used as



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Mt. Vesuvius.

burial places, and millions of bodies are interred there. The early Christians used them for hiding places in periods of persecution, their friends and sympathizers supplying them with food in secret.

NAPLES is the largest city of Italy. It is on the west coast, farther south than Rome. It is built on a hill, which slopes gently from a broad bay whose limpid waters are as blue as the sky. The people seem to live in the streets. Men and women sit there at work; and macaroni, for which Naples is noted, is left there to dry.

Vesuvius, back of Naples, is visited by many tourists. At the beginning of the Christian era prosperous towns and villages stood on its slopes. In 79 A.D. a great eruption took place, and the mud, water, lava and ashes completely buried two towns, Herculaneum and Pompeii. One day, many centuries afterward, on the former site of Pompeii, a farmer struck something hard with his spade. He continued digging, and unearthed a statue. This led to further excavations, and now a great part of Pompeii has been uncovered. For miles and miles around

In the foreground of the picture is the amphitheater at Pompeii. Bulwer-Lytton, in "The Last Days of Pompeii," pictures a scene in this amphitheater during the destruction of the city.

Vesuvius and Etna the country is covered with volcanic ash, which is very fertile. Flower gardens of surpassing beauty are found in these regions.

The other large cities of southern Italy are in Sicily.

PALERMO, the largest Sicilian town, is in the northwest part of the island. It is of great antiquity, and belonged to the Phœnicians, who were great sailors. Long before the time of Julius Cæsar, their galleys, rowed by slaves, voyaged as far as Great Britain. Palermo is a great port, shipping oranges, lemons and wine.

CATANIA, another port of Sicily, is near Mt. Etna. In addition to wine and lemons and oranges, Catania ships sulphur and pumice stone, from the volcanic region.

MESSINA, a large and flourishing city on the strait of the same name, exports large quantities of fine olives and olive oil.

MILAN, the largest city of northern Italy, is in the rich plain of Lombardy, as part of the Po basin is called. It is the chief financial, manufacturing and commercial city



The Cathedral, Milan, Italy.



Scene in Venice. The tall building is the Campanile or Bell Tower, which fell in 1902 and had to be rebuilt.

of Italy. It has excellent railway facilities, fine parks, big stores, and broad streets lined with handsome marble houses.

The Milan Cathedral, a large white structure of marble, is famed for its hundred spires. In the niches there are several thousand statues.

TURIN is at the foot of the Alps in the part of Italy known as Piedmont (*pied* means foot). The Alpine torrents furnish power for generating electricity, which is widely used in the factories of Turin. Silk and cotton goods are woven; leather is tanned and made into many articles. Turin is one of the chief seats of the automobile industry of the world.

GENOA is the birthplace of Christopher Columbus and the principal seaport of Italy. It has a large harbor, and imports coal, iron and sugar.

VENICE, the fairyland of Italy, is a city built on about eighty islands, connected by about one hundred bridges.



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The Rialto Bridge over the Grand Canal, Venice. There are three footways separated by two rows of shops.

There are no horses and no wagons in Venice, for the streets are canals. On the edge of each canal there is a narrow walk, from which the moss-covered, weather-stained sculptured marble houses rise abruptly. The long black boats which carry passengers about the city are called gondolas.

The Grand Canal sweeps between ranges of palaces embowered in foliage. At night the lights of the Venetian lamps and the sound of the mandolins played in the gondolas have an indescribable fascination.

The most noted bridge over the Grand Canal is the Rialto, an arched marble span, roofed, and so broad that there are shops upon it. It is the chief business center of the city. On a minor canal, between the Doge's Palace or courthouse and the prison, is the famous Bridge of Sighs, over which condemned criminals went to meet their doom.

Near the Bridge of Sighs is St. Mark's Square, the principal square of Venice, and St. Mark's Church, with its famous Campanile or Bell Tower.



Statue of Dante at Florence, Italy.

The Venetians make glassware and mosaics. Five hundred years ago Venice was the greatest seaport of southern Europe, but its trade has declined greatly. It is visited by many tourists.

TRIESTE is the chief port on the Adriatic Sea and is much larger than Venice. It is the port for the extensive commerce east and west with Austria and the valley of the Danube. It is connected with New York, Brazil, Buenos Aires and the Far East by steamship lines.

FLORENCE has many masterpieces of sculpture and painting in its art galleries. It was the home of Dante, one of the greatest poets of any time and country.

LEGHORN is one of the large ports of Italy. Besides oil,

wine and agricultural products, it exports straw hats and other articles of Italian manufacture. Shipbuilding is a leading industry.

BOLOGNA is an important railway center. Among other products, it manufactures the sausage which bears the name of the city. Its university is one of the oldest in Europe.

PISA is noted for its leaning Campanile, or bell tower.



"Leaning Tower" of Pisa, Italy. It is 181 feet in height. During its construction the foundation began to sink and caused the tower to lean.

Questions

1. How many miles is it from Milan to Florence?
2. From Florence to Rome? From Rome to Naples?
3. What is the distance from Milan to Brindisi?
4. Why is Brindisi a better port for the Indian mail steamships than Naples or Palermo?

5. What is the distance from Naples to Palermo?
6. What island is south of Sicily?
7. To what country does it belong?
8. What islands are northwest of Sicily? To what countries do they belong?

Exercises

Trace a voyage from Genoa to Venice. Through what waters would you sail?

Make a list of Italian cities arranged according to latitude.

Government. Italy is a limited monarchy, with Rome as the capital. In former times Italy was divided into several independent countries; but in 1860–1870 they were united under King Victor Emmanuel, and since that time the progress of Italy has been marked.

People. Italians are kind, social and polite. They are great lovers of beauty, in form, color and sound. Among the greatest names of history are those of many Italians, such as Columbus, the discoverer of America; Raphael, the painter; Michael Angelo, the sculptor, painter and architect; Galileo, the astronomer who perfected the telescope; Verdi, the composer, and Garibaldi, the patriot. In the warm southern regions the peasants are apt to be indolent, and, on the whole, are not prosperous. Many of them emigrate. The coffee plantations of South America employ hosts of Italian laborers. Italians are numerous in Buenos Aires, where they engage in the building trades and in storekeeping. The Italian colony of New York City numbers several hundred thousand. Many emigrants, after making a modest fortune in North or South America, have returned to Italy. The United States owes to the labor of Italians many of its most important public works.

Colonies. Italy has become an important world power, with colonies in northern and eastern Africa, and economic rights in part of Asia Minor.

Fiume, on the Adriatic, between Italy and Jugoslavia, is not a part of either country. It is an independent city-state. Italy has special rights in part of the harbor and Jugoslavia has rights in another part. Fiume is the chief port for shipping products to and from Jugoslavia.

Questions

1. Which extends farther west, Germany or Italy?
2. Which of the two extends farther east?
3. What two large islands belong to Italy?
4. Which is the nearer to Italy?
5. For what is it noted?
6. Which is farther north?
7. What other large island is near the Italian coast?
8. How does it compare in size with the two large Italian islands?
9. In what direction is it from Rome?
10. In what direction is it from Genoa?
11. To what country does it belong?

Exercise

Write a description of Italy.

CHAPTER VI

GERMANY

At the beginning of this century Germany was Great Britain's chief rival as a world power. In 1914, Germany began against Russia, France and Belgium the most terrible war of history. Most of the nations of the world, including the United States, were drawn into the conflict; and in 1919, Germany, after deposing the emperor, was com-



elled to sign the Treaty of Versailles, by which it gave up its colonies abroad and large areas in Europe, and surrendered its fleet. Although impoverished by a huge national debt, and by the loss of its commerce, Germany is still a powerful and important country. It has valuable natural resources and many large, well-built cities. The people are thrifty and skillful, and produce a great amount of manufactured goods of high quality.

Location. Germany occupies an advantageous position in the center of Europe, although one part, East Prussia, is separated from the rest by a part of Poland. Ten countries touch its borders. Tunnels through the Alps facilitate commerce toward the south, and in the north the Baltic and North seas, connected by the Kiel Canal, give easy access to Scandinavia, Great Britain, the Baltic republics and the open sea.

Size and Population. Among European countries, Germany is smaller than either Russia, France or Spain, but in population it is second only to Russia.

Questions

1. Which is farther east, the northeastern part of Germany or the Cape of Good Hope?

2. What countries border on Germany?

3. Compare the lengths of coast on the two seas.

4. Which coast is of greater importance to Germany?

Why?

5. What city is at the eastern entrance to the canal connecting the North and Baltic seas?

6. With what river does the western entrance to this canal connect?

7. Of what advantage is this canal to Germany?

Surface. The surface of Germany slopes in three stages toward the north. The lowest is northern and eastern Germany, which forms part of the Great Plain. Southern Germany consists of old, weathered mountains, worn down

to a plateau. Near Switzerland there are high mountain ranges. In the mountains of the Black Forest, east of the Rhine, there are peaks about 5,000 feet high.

Drainage. The rivers of Germany are navigable, and flow in one general direction, northward. Their tributaries, connected by canals, form a network of waterways through the land. The Rhine, Elbe and Oder have been internationalized, to give the countries in the interior, in which they rise, access to the sea.

The Rhine is called the most beautiful river of the world. It rises among the Alpine glaciers on the St. Gotthard Mountain and descends turbulenty to beautiful Lake Constance. At Schaffhausen (workhouses), in Switzerland, it forms the greatest falls of Europe. The Rhine thence wends its way through the plateau region. The majestic



The Lorelei Rock on the Rhine.

Lorelei Rock (between Bingen and Koblenz), at whose base many a ship has been shattered, is supposed to have been the haunt of a beautiful woman whose singing lured sailors to destruction. The Drachenfels (Dragon's Rock, between Koblenz and Cologne) is fabled to have been inhabited by a dragon, who was put to death by the hero Siegfried.



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Ehrenbreitstein.

The Rhine Valley is a great grape country. Hill after hill is terraced and vine-clad.

The mountains along the Rhine are topped with ancient castles, half in ruins. Among the celebrated castles is that of Bingen. Near Koblenz, where American forces were stationed after the armistice of 1918, is the modern fortress of Ehrenbreitstein, which was afterwards disarmed and dismantled in accordance with the terms of the treaty of peace.

The Rhine brings down from the highlands a great amount of alluvium, which forms a delta at its mouth. The delta of the Rhine is not within German territory, but in the Netherlands.

Questions

1. Which European countries are separated from Germany by mountain boundaries?
2. What important river of Germany has its outlet on foreign soil?
3. In what part of Germany is it?
4. In what country is its mouth?

5. By what country is northeast Germany cut off from the rest of the republic?

6. What countries benefit by the internationalizing of the Rhine, Elbe and Oder rivers?

Exercises

Make a list of the great rivers of Germany. State into what water each flows. Name a city near the mouth of each. Explain what is meant by an "internationalized river."



A terraced hillside with vineyards at Bingen on the Rhine. On the low island stands the Mouse Tower of the Bishop of Bingen, mentioned by Longfellow in "The Children's Hour."

Climate. Germany lies in the latitude of southern Canada, but Germany has a much milder climate than most of Canada, for it is in the path of the westerly winds, and is near enough to the Atlantic Ocean to get the benefit of the warm drift.

Products. As the practical and persistent Germans have made the mountains of the Rhine fit for the growth

of the vine, so they have tirelessly transformed the inferior soil of the northern plain into fertile farms, which produce beets, potatoes, flax, rye and other grains. The sheltered valleys of the south produce grapes, hops and tobacco.

About one fourth of Germany is forest. The mountains are just low enough to be well wooded. Germany has solved the problem of taking care of its forests. Forestry is taught in the agricultural colleges, and forest laws



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A field of sugar beets, Germany. Women hoeing.

have been made and are strictly enforced. New forests are constantly being planted to replace the trees cut for timber.

The rocky, rugged foothills make good pasture land, on which feed some of the greatest cattle herds of Europe. In the sections where sheep were formerly raised the refuse of beets is used to feed hogs.



Beet culture of Europe.

The plateau, and especially the Erzgebirge (ore mountains) abound in minerals. Germany has much coal and iron, but both minerals are inferior to ours in quality. Zinc, copper, lead, salt and silver are mined, and there are vast deposits of potash, valuable as fertilizer.

In southern Germany there are many mineral springs whose waters have a medicinal use. The mineral springs of Baden-Baden, Kissingen, Wiesbaden and Aachen, are visited by tourists.

Industries. The principal industries are agriculture, herding, manufacturing, mining, lumbering and commerce. Rye and oats are the principal cereals. More potatoes are raised in Germany than anywhere else in the world. Russia alone, of European countries, has (in normal times) more cattle.

Germany ranks high in the quantity of manufactured goods. Cotton, woolen, silk and linen textiles are ex-

tensively manufactured, much iron and steel are made, and various kinds of machines and ships are built in factories and shipyards.

The Germans were the first people to find that commercial sugar could be obtained from the beet root. As soon as they made this important discovery, they developed improved varieties of beets containing a larger amount of sugar.



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Making toys, Germany.

From hops and barley beer is brewed. Wine is manufactured in the Rhine country. The so-called Dresden china is made in Meissen, Saxony, the oldest seat of this industry in Europe, but the quality of the ware is inferior to the best French and English porcelain.

Germany's great forests have led to the manufacture of furniture and toys. At Nuremberg, men, women and children are busy from morning until night making toys, which are sold all over the world.

The manufacture of artificial dyestuffs, especially from coal tar, and the production of other chemicals, have been

carried to a high degree of perfection by the Germans. Many of the great industrial establishments maintain expensive laboratories, where experiments are carried on to find ways of making better and cheaper wares.

Germany has more miles of railway than any other country except the United States and Russia. From Berlin railroads radiate to every part of the country, and beyond its boundaries to other European capitals. Munich is on the line of the Oriental Express from Paris to Constantinople, and Berlin is connected, by way of Warsaw in Poland, with the Trans-Siberian Railway to the Pacific coast of Asia.

Commerce. Germany exports iron and steel goods, cotton, woolen, silk and linen textiles, china, toys, fish, potash and chemicals. Its imports are raw cotton, wool, silk, food-stuffs, glassware and dyes.

As a result of the World War, Germany's commerce was destroyed. Other countries supplanted Germany, not only in its former colonies, but in almost every market of the world, and the best vessels of its merchant marine were taken by the Allies to replace the shipping which German submarines had destroyed in the war. Germany is building new ships and striving to regain its foreign trade. German exporters cater to the needs of foreign buyers and are on friendly terms with the merchants of Russia, the interior of Asia, and most of the South American countries. Geography is very thoroughly taught in the schools and universities, and the people seek to develop the commerce of the country.

To the United States Germany sends textiles, toys, and manufactured steel and iron. The United States sends Germany foodstuffs, oil-cake, tobacco, cotton, petroleum, iron and steel manufactures.

Germany has for many years had a protective tariff, as has the United States; this is designed to prevent the impor-

tation of foreign products to the detriment of its own industries.

Cities. Germany has more than twenty cities each with a population of 200,000 or more. Great Britain, with a considerably smaller area and population, has about twenty such cities, and the United States, with a much greater area and population, has more than thirty.



The Brandenburg Gate, at the west end of Unter den Linden, Berlin.

BERLIN, the capital of the German Republic, is the third largest city of Europe. It is on the route of several great railways, which connect it with other capitals, and it has good water connections as well. It has therefore grown to be a large manufacturing and trade center. It controls the finances of Germany and manufactures much clothing and a great variety of articles of artistic merit. It is a clean city, with beautiful avenues and streets, made attractive by squares, small parks, and statues commemorative of great Germans and their deeds. Unter den Linden is a very broad street, a mile long. At one end is the palace of the President, and

Alexander Square, Berlin.



at the other a fine zoölogical garden. The University of Berlin has a world-wide reputation.

HAMBURG, the second largest city of Germany, is the most important seaport of that country, being the



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The President's Palace, Berlin.

outlet not only for German goods but for a large part of the exports of Austria, Hungary and Czechoslovakia. Located on the deep estuary of the Elbe, which is an internationalized river, it offers shelter to hundreds of ships from all parts of the world. Within the city several basins and canals afford communication with the river and harbor. A part of the city belongs to Czechoslovakia for use as a port. It is the chief center of German trade with the United States. The docks of the Hamburg-American line are located here. Hamburg carries on an extensive river traffic with the interior of Germany, and is connected by rail with Berlin and Paris. Hamburg has the advantage over the Baltic ports of being nearer to the open ocean and of having a harbor that in winter is free from ice.



Post Office, Hamburg, Germany.

BREMEN, situated on the Weser, about fifty miles from its mouth, is an important North Sea port, having trade connections with all parts of the world. It is the chief port in Germany for the receipt of raw cotton.

HANOVER is an important railway center, noted for the great variety of its manufactures and for the purity with which German is spoken there. The city has beautiful parks and suburbs.

STETTIN, near the mouth of the Oder, one of the internationalized rivers, ranks first among the Baltic ports. It is a great shipbuilding center. Czechoslovakia has the use of a section of the city as a port.

KÖNIGSBERG, on the Baltic, is the trade center and seaport of East Prussia, which is separated from the rest of Germany by a part of Poland. It is noted as the seat of an ancient and famous university.

KIEL, located at the eastern end of the Baltic-to-North Sea ship canal, has a fine harbor. The Kiel Canal is an international waterway.

COLOGNE is the chief commercial city of the Rhine Valley. Seagoing vessels ascend the Rhine and discharge

their cargoes there. It is a great railway center, having connections east and west. It ships wine and woolen goods. Cologne is noted for its cathedral and its perfumes.

MANNHEIM, at the head of navigation on the Rhine, has large sugar refineries; it manufactures iron, celluloid and electrical goods.



The Cathedral, Cologne, Germany

KREFELD, located like Cologne on the left bank of the Rhine, is a city about the size of Paterson, New Jersey. Next to Lyon, in France, it is the principal European city for the manufacture of silks and velvets. Like Lyon, it maintains its supremacy largely because of excellent water for dyeing. A textile academy is located there, to which students of textile industries resort from all parts of the world.

Near Cologne, but on the east bank of the Rhine, is DÜSSELDORF, one of the handsomest cities in Germany. It is one of a group of great manufacturing cities and towns which owe their prosperity to the coal and iron fields of



An electric railway in the Ruhr Basin. The cars are suspended below the track.

Westphalia, a province of Prussia. Besides iron, Düsseldorf has important cotton industries.

DUISBURG, DORTMUND and ESSEN are other great cities of the same region, engaged in iron and steel manufacture. These three cities, with several others, are in the basin of the Ruhr River, which is a very important manufacturing district. At Essen are located the famous Krupp foundries.

MAGDEBURG, on the Elbe River, is the most important trade center of central Germany. It has important steel works and sugar refineries. The surrounding district is largely engaged in beet-growing.

LEIPZIG is the bookshop of Germany. There are many printing houses, and the cheapness of their publications has made them known all over the world. Leipzig has a noted university and is also a trade center. Its leading article of commerce is furs.

DRESDEN is on the Elbe, near the border of Czechoslovakia. One of its chief exports is artificial flowers. Its art gallery is famous. Raphael's Sistine Madonna is one of its famous possessions.

CHEMNITZ, near Dresden, has extensive locomotive works, cotton mills and other factories.

BRESLAU is on the Oder River at the point where the railroads, east and west, find a convenient crossing. Woolen manufactures, especially of yarn, are important, and it has extensive commerce in grain, timber and coal.

MUNICH is the art center of Germany and has famous museums and conservatories of art and music. It is the



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The Courthouse, Munich, Germany.

seat of a great university. Its chief industry is the brewing of beer. Scientific instruments are made there. Munich is a great commercial city on account of its communications with Switzerland, Austria and Italy.

STUTTGART, a large railway center of southern Germany, is noted as a publishing city. It manufactures paper, paint and musical instruments. Its important museums and art galleries have made it a center of culture.

FRANKFORT-AM-MAIN is on a tributary of the Rhine. It is on the site of an ancient Roman camp. It is a great center of finance and banking.



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Nuremburg, Germany. Notice the steep roof on the left, with its many dormer windows.

NUREMBERG does not look like a modern city. Its quaint streets and houses accord well with its distinction as the greatest toy market in the world. Other products are fancy articles and carvings of wood and ivory.

Questions

1. Compare the latitude of Berlin with that of cities of the United States.
2. Name some important university towns in Germany. Name three in the British Isles. Five in the United States.
3. Which has the greater altitude, Cologne or Munich?
4. What is the principal industry at Stettin?
5. In what direction would a boat float if set adrift upon the Rhine River at Cologne?
6. Into what river does the Ruhr flow? For what is the Ruhr Basin noted?

Government. Germany is a republic. There are eighteen German States. Among the more important are Prussia, Bavaria and Saxony. Prussia is much larger than all the other States together. Each State sends representatives to the upper house of the national legislature. Both men and women have the right to vote for members of the Reichstag, or lower house. Each of the German States has its own local government.



The Reichstag Building, Berlin, Germany.

People. The Germans are descendants of the Teutonic branch of the Caucasian race, whose attacks helped to cause the downfall of the Roman Empire. The Germans are well educated and noted for their proficiency in arts and sciences. Their musical talent is highly developed. Great names in German history are: Frederick the Great; the authors; Goethe, Schiller and Heine; Wagner, the composer; and Bismarck, the statesman.

There are many people of German descent in the United States, in South America, and in the former colonies of Germany in Africa.



German peasants.

Questions

1. Which of the Great Powers is altogether farther south than any part of Germany?
2. What countries separate Germany from Italy?
3. Does the whole of any Great Power lie farther north than Germany?
4. Which European countries extend farther north than Germany?
5. Which of the Great Powers lie east of Germany? Which lie west? Which lie south?
6. Which of the Great Powers border on Germany?
7. What advantages does Germany derive from its central position in Europe? What disadvantages?

Exercises

Imagine yourself in Berlin. In what direction are you from New York? Chicago? San Francisco? Rio de Janeiro? Buenos Aires? Panama? Valparaiso? The Cape of Good Hope? Madagascar? Japan?

Describe a journey down the Rhine.

Write all you can of Germany.

CHAPTER VII

RUSSIA

Russia occupies the eastern part of Europe. It covers about half of Europe, and claims Siberia and other regions in northern and southwestern Asia.

Size and Population. Russia is by far the largest country in Europe. It has about as many inhabitants as Germany and Italy combined. Russia is only about half as large as the United States, but it has almost as many people.

Questions

(Turn to the maps on page 7 and in Appendix.)

1. What part of Russia is in the same latitude as the northern United States?
2. What countries border Russia on the west? On the south?
3. What part of Africa is in the same longitude as Russia?
4. How much of Russia extends farther east than Africa?
5. What part of the Pacific coast of Asia has the same latitude as the Caucasus Mountains?

Surface. Russia in Europe is a vast plain, scarcely interrupted by the Valdai Hills, and bordered on the east by the Ural Mountains, and on the south by the Caucasus. The limits of political European Russia extend east of the Ural Mountains and do not, therefore, strictly coincide with the natural boundary of Europe.

The northern part of the plain is marshy, and is known as the tundras. It is a bleak, dreary region, where moss, lichens and stunted trees are the only forms of vegetation. The Samoyeds, the semi-savage inhabitants, live in bark tents and, with their dogs and reindeer, move about at will.



Samoyeds and their dogs.

South of the tundras is the forest region, a vast wilderness covering two fifths of Russia, and abounding in fur-bearing animals, such as the sable and ermine.

In sharp contrast with this region is the one directly south of it. Here population is densest, for the soil is fertile. Because of the rich black mold it is known as the Black Earth region.

Southeast of the Black Earth region are the steppes, treeless grass-grown plains, which supply pasturage for sheep, cattle and horses, the largest herds of all Europe. There is not enough rainfall for grain.

The Caucasus Mountains rise abruptly from the steppes. They form part of the physical boundary between Europe and Asia. Next to the Alps they are the highest mountains of Europe. Mt. Elburz, an extinct volcano, is about 18,000 feet in height.

Since the rivers have their sources at moderate eleva-

tions, and then flow through remarkably level plains, they have sluggish currents. Together with numerous canals which have been constructed, they afford excellent means of transportation during the summer.

The Volga, the longest river in Europe, rises in the Valdai Hills and flows into the Caspian Sea. It forms a large delta at its mouth. The Caspian Sea is the largest



The Volga River at Nizhni Novgorod.

inland sea in the world. It is a body of salt water more than five times as large as Lake Superior. It is about 85 feet below the level of the sea. It has many tributaries besides the Volga, but has no outlet. Evaporation leaves the water salt. There are steamships on the Caspian.

Questions

(Turn to the map, page 14.)

1. In what elevated part of the Russian plain does the Volga River rise?
2. What other river flowing southward rises near the Volga?

3. What is the character of the mouth of the Volga River?
4. What causes it?
5. What is the elevation of the land about the mouth of the Volga?
6. What are the plains of this region called?

Climate. Russia has a continental climate, that is, a climate like the interior of all great land masses of the Temperate Zone, hot in summer and cold in winter. It is quite open to both the Arctic and the Mediterranean winds. Russia has, therefore, extremes in temperature. The country is so large that the average temperature of southern Russia is considerably higher than that of the tundras.

In the entire extent of Russia there are no mountains ranged east and west to interrupt the progress of the Polar winds. In winter the rivers are frozen and the ground covered with snow for several months. Even the Black Sea and Sea of Azof are frozen at times. Russia also fails to secure moisture from the Mediterranean winds because of the mountain barrier along its southern border. Hence the steppes of southeastern Russia are too dry for the growth of grains. The rivers also suffer from this cause, and in summer the water is often so low as to make navigation difficult.

When the westerlies reach Russia they still contain some moisture, enough for moderate rainfall in the west, but there are frequent droughts in the south and east.

Products. The Black Earth region is the great granary of Europe. The climate is especially suited to the growth of wheat. In normal times Russia produces more wheat than any other country except the United States. It leads the world in the production of hemp; flax also is grown. Other important crops are rye, barley, sugar beets and sunflowers. Russians munch sunflower seeds as we do

peanuts. Farther south, tobacco, cotton and grapes are raised.

The Urals are rich in platinum, graphite, gold, iron and copper. More platinum is mined in Russia than anywhere else in the world.



Muzhiks, or Russian peasants.

In the Caucasus, at Baku, on the Caspian Sea, there are great petroleum wells. Sturgeon are caught in the Caspian and Black seas to obtain the roe, which, when prepared, is called caviar, a favorite Russian dish.

Industries. Most of the people are engaged in farming and stock raising. None of the land is private property; it belongs to all the people in common. Lumbering and mining are important industries.

Manufactures are not well developed, though cotton mills,

sugar refineries and foundries have been established. Some textiles are woven on hand looms in the home. The Russians are skilled in tanning and dyeing.

Commerce. Russia has no good seaport, so that its commerce is mostly internal. Much trade goes through the foreign ports of Reval and Riga. Trade is chiefly with Great Britain. All commerce is limited because the extreme cold of winter closes up nearly all the harbors, except



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The Winter Palace, formerly the residence of the Czar, Petrograd.

in the far south, and makes the canals and rivers unfit for navigation during a considerable portion of the year. Tea is one of the chief imports. In normal times, Russia has grain, flax, petroleum, hides and furs to export, and requires cotton, copper, locomotives, steel rails and farm machinery.

All industry is controlled by the communistic government. The harvests of the farmers are levied upon, and manufacturers and merchants lease their establishments from the government. This has resulted in greatly reduced production and has hindered trade with other countries.

Cities. Moscow, the capital, is built on hills and has the appearance of an Oriental city, with its towers, great top-shaped domes, and pink, yellow and blue buildings.



The Kremlin, Moscow. At the extreme right is the Great Bell of Ivan.

In the center of the city there is a citadel, called the Kremlin. Inclosed in the fortified walls are the old palace of the Czars, the cathedral where Czars were crowned, and the tower built by Ivan the Great, Russia's most tyrannical ruler. Near the tower is the Bell of Ivan, which once occupied a place in the top of the tower. It is the largest bell in the world.

The location of Moscow, in the midst of a rich agricultural region, and in the path of European trunk lines, has made it a great trade center. It has numerous factories for the manufacture of linen, woolen and cotton goods.

PETROGRAD was formerly the capital, but communist control and the moving of the government to Moscow greatly diminished its prosperity. It is a city of wide streets and beautiful buildings, but these are not of the native Russian type of architecture, like those of Moscow with their swelling domes.

As a rule, the settlement and growth of a city are due to some advantages which the locality offers. Down to

the time of Peter the Great, Russia was Asiatic rather than European. The object of the great monarch in founding his capital at Petrograd was to promote foreign commerce and bring Russia closer to the other European nations than it had been with its capital in the interior of the country. The site of Petrograd was once a swamp. Although icebound for several months every year, it was



The Dneiper River at Kief.

once the greatest seaport of Russia, and may regain its importance when trade with foreign countries is resumed.

NIZHNI NOVGOROD, on the Volga River, was formerly noted for its annual fair.

ODESSA is in the Ukraine, in the southwestern corner of Russia. It is the great grain market of the Russian plain and the principal port on the Black Sea. Near it are important salt works.

KIEF, on the Dneiper River, is the foremost city of the Ukraine, which includes much of the famous fertile "Black Earth" region of Russia. Kief is the trading center for the sugar beet section, and the refining of sugar is its chief manufacturing industry. It is joined to Moscow by railroad.

KHARKOV is an important manufacturing city and a great center of trade, owing to its advantageous position as regards railways.

Questions

(Turn to the map, page 7.)

1. Why are there no important cities near the mouth of the Volga River?
2. What great river flows into the Black Sea south of Odessa?
3. With what countries does Odessa give Russia communication?
4. What is the distance from Moscow to Petrograd? What is the distance from Petrograd to Odessa?
5. What seaports has Russia on the Arctic Ocean?
6. Name the principal cities of Russia. What are the leading industries of each city, or of the region in which it is situated?
7. What is the prevailing climate of Russia? Why is Russia unprotected from Arctic winds? Account for the scanty rainfall in southeastern Russia.

Government. Russia is a communistic republic; its official name is the Russian Socialist Federal Soviet Republic. The nation is ruled by a Congress elected by the working men, women, soldiers and peasants. The Congress elects a President and Council; each member of the Council has charge of some branch of the government.

People. For many centuries Russia has been gradually progressing in civilization. The nearness to Asia, the vast extent of the country, the centuries of ignorance, the

tyranny of the semi-Oriental government under the Czars, the burdens of warfare, the long serfdom, the lack of wealth and the severe cold of the winter have tended to make the peasant class unenterprising and indifferent. Count Tolstoi, a great Russian novelist, did much to elevate the ideals and ambitions of the common people. The former nobility and many persons of the middle class are well educated. The Russians belong to the Slavonic branch of the Caucasian race.

Tea, prepared in a great urn, called a samovar, is a favorite beverage among all classes.

Russia is a land of many races, and the habits of the people vary greatly. The Cossacks of the steppes are intrepid horsemen. They devote themselves to rearing herds of horses, and the finest cavalry soldiers of the Russian army were recruited from among them. Many residents of Russia are of the Jewish race. On account of religious and political persecution at times, great numbers of Russian Jews have emigrated to the United States.

Railroads. Russia is so large that transportation of products presents a difficult problem. In winter the canals and rivers are frozen ; in summer the rivers are often low. The level country has made it easy to join the numerous rivers by canals, and it is possible to travel from the Baltic to the Caspian Sea by the waterways of European Russia ; but such transportation, although cheap, is slow.

These considerations have led to the development of railways in Russia. From Moscow as a center, railroads radiate to every quarter. Petrograd and Odessa are reached by railways, as are Sebastopol, on the Black Sea, Archangel, on the White Sea, and Murmansk, an ice-free port on the Arctic Ocean. North and south, east and west, are linked by the great railway system, which, however, does not stop with Russia's European possessions, but extends into and across Asia. The Transcaspian Railway reaches to the



A samovar, or tea urn, in a tea seller's shop, Russia.

borders of India. The still greater Trans-Siberian Railway has continuous tracks from the Polish frontier to Vladivostok on the Pacific Ocean, a distance of five thousand miles.

Questions

1. In what zones is Russia?
2. How large is the Caspian Sea?
3. What is the great grain-producing region of Russia?
4. In what part of Russia are platinum, gold and copper mined?
5. What causes can you mention for the low condition of the Russian peasants?

Exercise

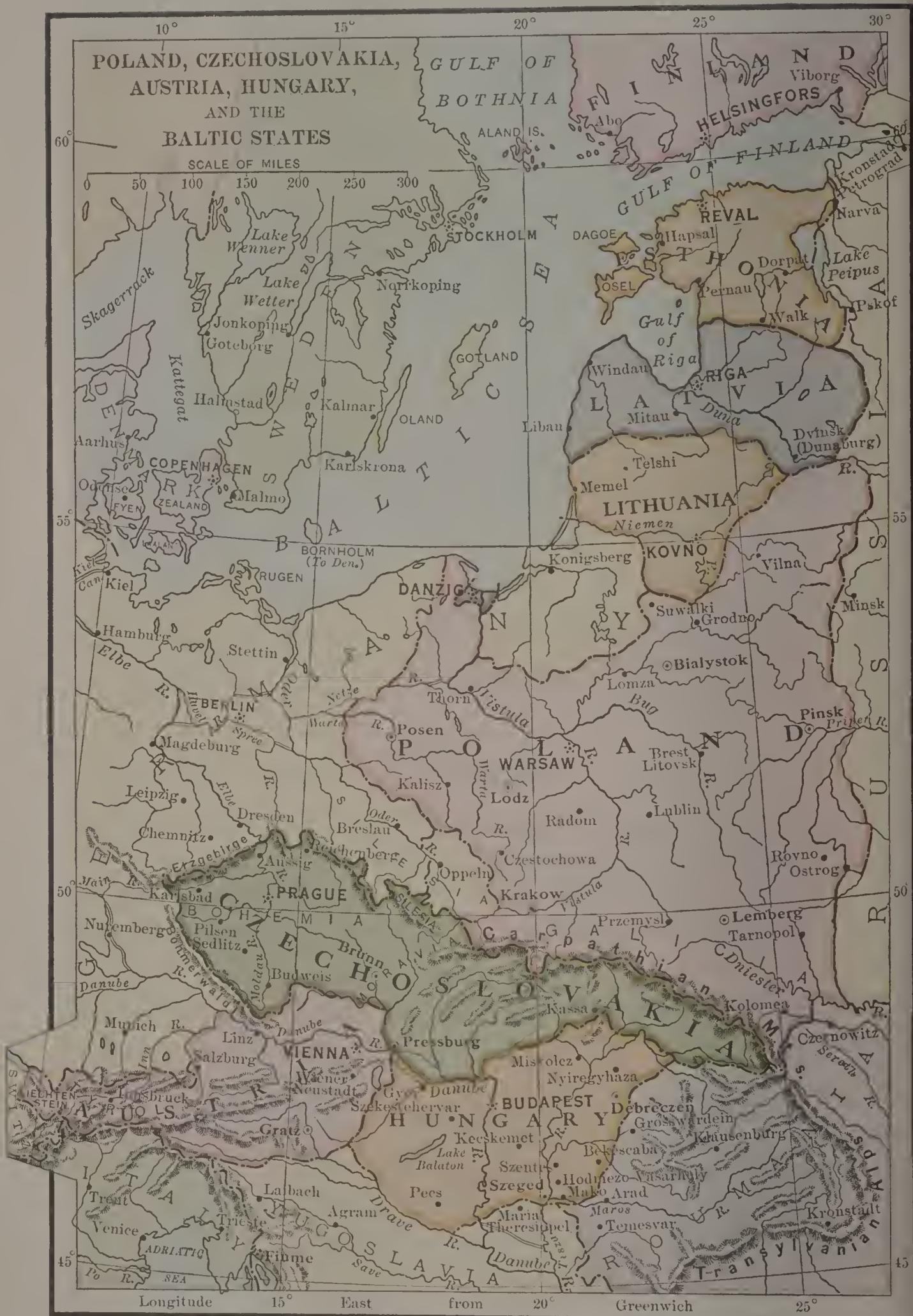
Write an account of Russia.

Compare the government of Russia with that of Great Britain. With that of the United States.

POLAND, CZECHOSLOVAKIA,
AUSTRIA, HUNGARY,
AND THE
BALTIC STATES

AND THE

SCALE OF MILES



PART III.—MINOR COUNTRIES OF EUROPE

CHAPTER VIII

POLAND AND THE BALTIC REPUBLICS

POLAND

Poland is an ancient nation that has undergone many political changes. More than a century ago Poland lost its separate national existence, when it was partitioned among Germany, Russia and Austria. At the end of the World War it was reorganized as an independent country, and it is now a republic.

Location and Size. Poland lies east of Germany, between the Carpathian Mountains and the Baltic Sea. It is larger in area than the United Kingdom or Italy, although less populous than either of them.

Physical Features. Most of Poland is a low rolling plain. The central part is a fertile farming country. In the south is Galicia, which extends to the crest of the Carpathian Mountains. In the north there are large swamps and many lakes. The swamp land is partly covered with forests.

The Vistula and its tributary, the Bug River, are broad, shallow streams, which overflow their banks during the spring floods, and in summer afford transportation for flat-boats and rafts. The climate is genial, the winters neither long nor severe. Except in the south, where the highlands condense the remaining moisture of the westerlies, the rainfall, although sufficient for farming, is not plentiful.

Products. The rich soil of the central plain produces large crops of grain, sugar beets and potatoes. Much live stock is bred there. In the plateau section coal, iron and copper and rich oil fields are worked. Near Krakow on the Vistula are some of the richest salt mines in the world. In these mines, which are visited by tourists, there are spacious caverns ornamented by elaborate carvings in the rock salt.

Commerce. Grain is the chief export. Most of Poland is



Warsaw, Russian Poland.

shut off from the sea by East Prussia, a part of Germany; but a narrow strip along the Vistula River gives the Poles access to Danzig and the Baltic Sea. The Niemen River, which is the outlet for the products of northeast Poland, is an internationalized waterway from Grodno to the Baltic Sea.

Cities. WARSAW, the capital, is situated upon the Vistula River, and is connected by railways with Berlin, Vienna, Petrograd and Moscow; it is an important commercial and manufacturing center, about the size of Cleveland.

The manufactures are highly varied, and include carpets, cotton goods and other textiles, boots, harness and other leather goods. There are large distilleries, breweries and sugar refineries.

LODZ is a modern factory town about as large as Newark, New Jersey. Its industries, which include manufactures of cotton, iron and steel, have been largely built up by immigrants from Germany.



Market place in a Polish city. Much trading is done in such markets in European cities.

KRAKOW, in south Poland, at the head of navigation on the Vistula, has fine old buildings and numerous other relics connected with Polish history. Many Polish heroes, including Kosciusko, are buried there. Krakow is a railroad and trading center.

People. The Poles are noted for bravery and patriotism, but failure in the past to support their national leaders brought them to disaster. They are a hardy race, especially talented in music. Chopin and other great composers were Poles. Kosciusko, a Polish nobleman, was one of Washington's aids in the American Revolution.

There are many Jews in Poland, many of whom are money lenders and merchants. In the days of the Russian monarchy they were subject to much persecution, and for that reason great numbers have emigrated to the United States.

DANZIG

Danzig is a free city under the control of the League of Nations. It is at the mouth of the Vistula and is the seaport of Poland, which has special rights in the city. Danzig is noted for its picturesque old buildings and great modern shipyards. The principal industry is the transshipping of products to and from the interior of Poland and adjacent parts of Germany.

Questions

1. What is the most important river in Poland?
2. With what great cities is Warsaw connected by rail?
3. What part of Poland is the most fertile?
4. What part of Poland is directly east of the northern part of the United States?

THE SMALL BALTIC COUNTRIES

Four small republics border the eastern shore of the Baltic Sea. These countries — Finland, Estonia, Latvia and Lithuania — were formerly parts of Russia. Their location on the outskirts of the Empire made it easier for them to become independent nations. Russia thereby lost much coast line and several important ports.

Finland belonged to Russia for a century before the World War, but has since become an independent republic. The country has much swamp and forest land, where reindeer, elk, wolves and other wild animals are found. The products of the forests, such as timber, pitch, tar and resin, called naval stores, form the chief exports. In the open country cattle are raised.

The Finns are a Mongolian people, related to the Magyars of Hungary. They are honest, industrious and energetic.

HELSINGFORS, on the Gulf of Finland, is the capital and chief port of Finland. It is a handsome town, with a fine fortified harbor, which, however, is frozen in winter. The



The harbor of Helsingfors, Finland.

exports are chiefly lumber and dairy products. The imports are wine and manufactured goods. It is the seat of a university, and has the most northern botanical garden in the world.

Esthonia lies south of the Gulf of Finland. It is a flat country with many lakes and marshes, caused by glacial action. Farming is the chief industry. The summers are too short for wheat to ripen, but large crops of rye, barley, oats and potatoes are grown. There are large herds of dairy cattle. Extensive forests furnish paper pulp and timber, and there are match factories and sawmills.

The Estonians are of Mongolian descent, and are related to the Finns. Many of the large farms are owned by Germans and Poles who practice modern methods of agriculture.

REVAL, the capital, is a busy port and a popular seashore resort.

Latvia lies south of Esthonia. The chief feature of the coast is the Gulf of Riga. The Duna River is the largest stream. By means of canals goods are shipped to the river

ports on the Volga and Dnieper. Farming is the chief occupation. Like other Baltic states, Latvia has thick forests and many glacial lakes.

RIGA, the capital, is as large as San Francisco. It is an ancient seaport with narrow, crooked streets and warehouses that were built during the Middle Ages. Commerce stops when winter sets in, because then the waters of the harbor are frozen. Riga is the outlet for forest, farm and dairy products of the Baltic states, and for grain, flax, hemp and other products of Russia. In addition to its water routes, it has excellent railroad facilities.

Lithuania extends from Latvia to East Prussia (part of Germany) and Poland. It is a forested, marshy country.

The Lithuanians are a sturdy, blond race who are related to the Letts of Latvia. Most of them are farmers.

KOVNO, the capital, is located on both sides of the Niemen River.

Questions

1. What part of North America lies in the same latitude as Finland?
2. What are the principal ports of the Baltic republics?
3. In what general direction do the rivers in the Baltic countries flow?

Exercise

Write out the chief reasons why Danzig is important to Poland.

CHAPTER IX

AUSTRIA, HUNGARY AND CZECHOSLOVAKIA

AUSTRIA

Austria is the most easterly of the Teutonic nations. It is the meeting ground of two great European races: the Teutons and the Slavs. Austria is a small country weakened by defeat in the World War, which was brought on by a quarrel of Austria with Serbia.

Austria is not quite so large as Maine but has almost as



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The Danube River in Austria. On the high cliffs above the village are the ruins of the castle where Richard the Lion-Hearted, King of England, was held prisoner.

many people as all New England. It is a country of highlands. The section of the Alps in the west is known as the Tyrol, and by many its scenery is deemed grander than that of the Swiss Alps. The Danube River crosses the northern section. This part of the Danube is quite as picturesque as the Rhine, being bordered by even higher cliffs.

Industries. Agriculture is the chief occupation of Austria. Dairying and forestry are considerable industries, and there are mines of coal, salt, iron, and other metals. Manufactured goods are the chief exports.

Cities. VIENNA is the capital of Austria. It is on the Danube and is readily accessible from the neighboring countries. It has developed rapidly in manufacturing, and is the center of inland trade. It is one of the largest and most beautiful cities of Europe. The University of Vienna has ranked among the best of the famous old universities of Europe.

Government. Austria is a republic. The Austrians use the German language.

HUNGARY

Size. Hungary is about as large as Indiana, but has a population larger than any state in the Union except New York or Pennsylvania.

Physical Features. Hungary is mostly a fertile plain, with a small mountainous section in the north. The country has no seacoast. The Danube River, an internationalized waterway, and the Paris-Constantinople railroad, which parallels it, are the chief avenues of commerce. The climate is temperate, but with greater extremes than in the countries that lie nearer the ocean. Most of the moisture carried by the westerlies is condensed in the Alps; hence frequent droughts occur in eastern Hungary. Irrigation is used to some extent.

Products. Hungary is one of the world's chief granaries. A variety of hard wheat is especially suited to the soil of Hungary and yields prolific harvests. Rye, barley, oats, tobacco, flax and sugar beets are grown. The vine and the mulberry are cultivated in southern Hungary. Hungarian opals are esteemed the most beautiful.



One of the bridges across the Danube in Budapest.

Cities. BUDAPEST is the capital of Hungary. At one time Buda and Pest, located opposite each other at a narrow part of the Danube, were separate cities. The two have united, and are connected by six beautiful bridges. Milling is the principal industry. Situated as it is in the heart of the wheat region, Budapest is the Minneapolis of Europe.

People. The people of Hungary call themselves Magyars (pronounced mod'yars). They are of Mongolian or Asiatic origin. Most of them are farmers. They are lovers of music and perform with special merit upon stringed instruments.

There were several revolutions in Hungary after the World War, and its government is not firmly established.

Questions

1. Which is larger, Austria or Hungary? (See page xi.)
2. Which has the larger population?
3. What countries bound Austria? Hungary?
4. On what river are the capitals of both Austria and Hungary situated?

CZECHOSLOVAKIA

Czechoslovakia is a new country which lies at the geographical center of Europe. It derives its name from the Czechs and the Slovaks, who together constitute the bulk of the inhabitants.

Shape and Size. Czechoslovakia resembles Cuba in form but is one fourth larger in area, and has only land boundaries. It contains fully twice as many people as Austria.

Surface and Climate. Czechoslovakia stretches along the northern edge of the main highland of Europe. The western third of the country comprises the plateau of Bohemia; the eastern or Slovak section is bounded on the north by the crest of the Carpathians. Between these are the regions known as Moravia and Austrian Silesia. Moravia extends south to the Danube River. The Elbe and its tributary, the Moldau, are the chief rivers of Bohemia.

Czechoslovakia lies so far inland that it has a continental climate; it is rather high and is healthful.

Products. A variety of agricultural pursuits flourish upon the fertile upland meadows. Potatoes, sugar beets, barley and other grains are the main crops. There are orchards of plums and other fruit trees. Herds of cattle and great flocks of geese graze on the pastures. Beekeeping is a profitable occupation.

Czechoslovakia has rich mines of coal and iron and valuable beds of pottery clay. There are a great many mineral springs, some of which, as those at Karlsbad and Sedlitz, are widely known for their medicinal qualities.



Old royal castle and cathedral in Prague, the capital of Czechoslovakia. The castle is now the residence of the president of the Czechoslovak Republic.

Its mineral wealth, the water power of its many mountain streams, and the skill of its workmen, have made the western part of Czechoslovakia one of the chief manufacturing districts of Europe. Bohemian glassware and Karlsbad china have a world-wide reputation. Not only Prague and other large cities but many small towns are busy centers of industry. Cloth and leather goods, beer, refined sugar, flour, drugs, chemicals, lead pencils, musical instruments, are some of the varied products for which the factories of Bohemia are noted.

Commerce. Czechoslovakia has no coast line. The internationalized rivers, the Danube, Elbe and Oder, provide waterways to the southeast and the northwest, and to the south it has special railroad facilities to Trieste and Fiume.

In these ports, as in Hamburg and Stettin, Czechoslovakia has special rights in the harbors. Manufactured goods are the chief exports.

Cities. PRAGUE, the capital, has a site of great natural beauty on the Moldau River. It contains almost three quarters of a million inhabitants, and is a famous center of learning as well as of trade. The University of Prague is one of the oldest in Europe. Machinery for farms and factories, paper, beer and refined sugar are the chief products made in Prague.

BRÜNN, the second largest city, is a thriving industrial and railroad center. Weaving is the chief occupation.

People. The Czechs and the Slovaks are closely related branches of the Slavic race, and are therefore related to the Poles and the Russians. The Czechs are the natives of Bohemia; they are well educated and progressive and constitute the ruling element of the population. The Slovaks are mostly peasants. Large numbers of Germans and Jews live in the cities.

Czechoslovakia is a republic.

Questions

1. How does Czechoslovakia compare with the United States in latitude?
2. What are the chief rivers in Czechoslovakia?
3. About how long is Czechoslovakia east and west?
4. What are the most important products of Czechoslovakia?
5. What means of access to the sea does Czechoslovakia have?

Exercise

Compare the physical features of Austria, Czechoslovakia and Hungary.

CHAPTER X

THE IBERIAN PENINSULA

Location. The Iberian Peninsula is a table-land projecting from southwestern Europe. It approaches within eight miles of Africa, and lies between the Mediterranean Sea and the Atlantic Ocean.

Size. There is room on this peninsula for any European country, except Russia. Texas is the only State in our country that has a greater area. Although nearly five times as large as England, the peninsula has fewer people.

Form. The peninsula has a very regular outline, almost square in shape, and with few indentations. Seven eighths of the boundary of the peninsula is coast line. The remainder adjoins France, from which it is shut off by the Pyrenees.

Surface. The Iberian Peninsula is a plateau, crossed from east to west by mountain ranges. In the north the Cantabrian Mountains extend west of the Pyrenees along the Bay of Biscay, and the Sierra Nevada form a barrier along the southern side. Between them rises a plateau over two thousand feet high, deeply cut between the ranges by rivers, whose courses are mostly west into the Atlantic Ocean. The Ebro in the north, from which the peninsula probably takes its name, is the chief exception, flowing into the Mediterranean Sea. On account of the



mountainous valleys through which they flow, the rivers do not serve as avenues of commerce to the interior. The Guadalquivir, which signifies "great river," permits the passage of ships for but seventy miles from its mouth. A conspicuous feature of the coast is the Rock of Gibraltar. It rises to a height of 1,400 feet above the narrow strait of the same name. The ancient Greeks and Romans, who knew only the countries along the Mediterranean, called this promontory, and the one opposite it on the African coast, the Pillars of Hercules. Gibraltar is now a British possession, and a coaling station for the fleet of that country. It is heavily fortified, and gives England strategic control of the Mediterranean Sea.

Climate. In winter the westerlies blow over the peninsula and furnish moisture. In summer they move northward, and the southern part of the peninsula is in the horse latitudes, a belt of calms. Consequently, there are



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The Rock of Gibraltar, Spain.

alternate rainy and dry seasons. The most abundant rainfall is in the northwest and along the coasts, where mountain ranges extending east and west admit the winds into the western valleys and convert the moisture into rain before the winds reach the interior. Along the southern slope of the Sierra Nevada, from Gibraltar eastward, the winds from the southwest cause the warmest winter climate in southern Europe.

In the north, the Pyrenees act as a barrier against the winds which blow over France. The interior of the peninsula is dry, with great variations in temperature. The rivers, although not navigable, furnish water for irrigation. The winters are cold enough to produce ice, and the summers are very hot.

Products. The mountains of the Iberian Peninsula are rich in minerals. Quicksilver is mined at Almaden. This metal, which is also called mercury, is found in few localities, the others of importance being Italy, Yugoslavia, and California. It is used in the thermometer and barometer, for making mirrors, and to separate gold and silver

from the ore. Spain is one of the principal sources of the world's supply of lead and copper. Besides these minerals, coal and iron abound on the peninsula and are mined extensively.

The vegetable products of the peninsula vary with the



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Gathering dates, southern Spain. The man is at the top of a date palm; the rope slips around the tree and around his body, his feet being braced against the trunk of the tree.

location. In the highlands wheat is grown, as are apples and other temperate fruits. In the south are grown tropical fruits and vegetables. The vine is extensively cultivated. The date palm is a valuable tree, as is also the cork oak. This tree is cultivated in groves for its bark, which is very light and elastic. The bark, which is one or two inches thick, is stripped off in large sections. In from five to ten years another layer of bark is grown.

Much of the land is given over to pasture. In the south fine cattle are raised. Some are exported, principally to



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Cork trees. Notice where the bark has been stripped off.

England; and others, those of Andalusia in the south, are bred for bull fights. In the north, where the climate is drier and the grass less luxuriant, sheep are raised, because they can crop shorter grass than cattle. The merino sheep, prized for their fine wool, originally came from Spain. The flocks, which sometimes number over two thousand, graze on the mountains in summer, and in win-

ter descend to the valleys for food and protection from the weather. Herds of swine are fed on the acorns of the cork oak.

Manufacturing is unimportant. Wine is made, and in the cities tobacco, cotton, cork and paper are manufactured.

Countries. The territory of the Iberian Peninsula is unequally divided between two countries, Spain and Portugal, the former being more than five times as large and three times as populous as her smaller neighbor. The people of these countries speak different languages.

Questions

1. Which other European peninsula resembles the Iberian Peninsula? In what respects?
2. In what two ways do the mountains of the Italian Peninsula differ from those of the Iberian Peninsula?
3. Where are the Balearic Isles?
4. To what country do they belong?



The Alhambra, Granada, Spain.

SPAIN

Spain occupies all of the Iberian Peninsula except a narrow section bordering on the Atlantic Ocean.

At one time Spain was the leading country in the world, controlling European politics and possessing broad domains in the New World. Columbus sailed under the Spanish flag, and discovered America in the same year that Granada was captured from the Moors. The Moors were Mohammedans, who invaded Spain from Africa, and for centuries disputed the possession of the country with the Christian Spaniards. In the sixteenth century, after the expulsion of the Moors had restored Spanish supremacy at home, and the discoveries, explorations and conquests of Columbus, Magellan, Cortez, Pizarro and others had given Spain colonial possessions in both hemispheres, Spain reached her greatest power.

The new possessions attracted the strongest and most adventurous men away from Spain, and the great treasure that poured into the country from the colonies corrupted those who remained. Other causes contributed to weaken Spain, and her power has gradually declined, until to-day she is no longer one of the great powers of Europe. In the Spanish-American war, Cuba secured her independence, and the Philippines and Porto Rico came into the possession of the United States.

Questions

1. Which European countries are wholly in the same latitude as Spain?
2. What countries border on Spain?
3. In what direction is each from Spain?
4. Compare the Ebro with the Po as to direction and character of the land drained.
5. Is Spain chiefly in east or in west longitude?

People. The wealthy and educated people of Spain are high-spirited, intelligent, and strive to make Spain again a progressive nation, but the greater number of the people are ignorant and very poor. Two thirds of them can neither read nor write. Their methods of farming



A bull fight, Seville, Spain.

are antiquated, and their love of amusement, especially of the brutalizing bull fight, interferes with their progress. Spain, however, is increasing in wealth since being relieved of the expense of governing rebellious colonies.

Government. Spain is a limited monarchy. King Alfonso is the ruler.

Commerce. Although surrounded by water and situated at the junction of the Mediterranean and Atlantic, Spain has little commerce, because of the low economic condition of her people. The commerce of Spain is chiefly with Great Britain and France. The imports are largely cotton and other textiles, machinery, and food, such as wheat and fish. The roads are poor, and communication with France is hampered by the fact that there are few

passes across the Pyrenees, and those are high. The larger cities of the interior and coast are joined by railways which connect with those of France by routes around both the eastern and the western end of the Pyrenees. It is, however, impossible for trains to pass from one country to another because the railroads are of different gauge, as a precaution against invasion from either side of the Pyrenees. Several new routes across the mountains are in process of construction. As the rivers flow through deep valleys in the plateaus, it is impossible to connect them readily by canals, as is done in France and Germany.

Cities. MADRID is the capital. It is situated upon a plateau, in the very center of Spain, and derives its im-



Madrid, Spain.

portance from the fact that it is a railway center and the seat of government. The presence of the court brings the wealthy and cultivated Spaniards to Madrid, which resembles in a measure the other European capitals, having a magnificent palace, a great art gallery, and important educational institutions. Near Madrid is the Escorial, a celebrated building, which contains a palace, monastery, church, and is the burial place of many Spanish sovereigns.

BARCELONA is the chief seaport and, next to Madrid, the largest city in Spain. It is situated on the Medi-

terranean, near the valley of the Ebro, which gives it access to the most enterprising section of the interior. It is the most important manufacturing city in Spain, making textiles of silk, wool and cotton, as well as shoes and other leather goods. These wares, together with copper and wines, form the chief exports.

MALAGA ranks next to Barcelona as a seaport, and exports grapes, wine, raisins, and such tropical fruits as olives, lemons, oranges and dates.

VALENCIA, on the Mediterranean Sea, is a large seaport with many ancient Moorish buildings. The manufactures include silk and other fabrics. It is noted for its oranges.

SEVILLE is at the head of navigation on the Guadaluquivir River. It is an important port, and manufactures tobacco in large quantities. The cathedral is one of the largest churches in the world. The Alcazar, a Moorish palace, is a beautiful building.



The Cathedral, Seville, Spain



Ocean steamers on the Guadalquivir River at Seville, Spain.

BILBAO, located on the Bay of Biscay, near the iron mines, exports more iron ore than any other port on the mainland of Europe.

GRANADA was the last city held by the Moors. It is located upon the northern slope of the Sierra Nevada, and was strongly fortified. The chief feature of interest



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Loading iron ore at Bilbao.

is the Alhambra, which was the citadel and palace of the Moorish kings. Its thick walls, surmounted and strengthened by great square towers, inclose a large number of rooms and galleries around pleasant courts, which are adorned with columns, arches and fountains, and contain a profusion of palms and flowers.

Questions

1. Which is farther south, Madrid or Rome?
2. How is the location of Madrid like that of Vienna?
3. What differences are there in these locations?
4. Which has the more advantageous location? Why?
5. Trace a voyage from Bilbao to Barcelona. Through what waters would you pass?
6. What islands belonging to Spain would you pass?
7. What distance is saved in going by rail?
8. What is the principal export of Bilbao?

Exercise

Write an account of Spain.

PORTUGAL

Location, Size, Surface, Climate. Portugal lies along the Atlantic coast of the Iberian Peninsula. It is in about the same latitude as the region from northern Pennsyl-



Da Gama was a celebrated Portuguese navigator. In 1497 he made the first voyage from Europe to India, sailing around the Cape of Good Hope. His tomb is in a public building near Lisbon.

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The tomb of Vasco da Gama.

vania to southern Virginia. It is about as large as Maine. On account of the mountains in the north, which condense the moisture of the westerly winds, that region has a very heavy rainfall. The southern part of the country receives the hot African winds and has a drier, subtropical climate.

Commerce. The trade of Portugal is largely controlled by Great Britain. Much of it is with Brazil, which at one time belonged to Portugal, and in which the Portu-



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Lisbon, Portugal, and the Tagus River.

guese language is spoken by more people than live in Portugal.

Wine and cork are the chief exports. Foodstuffs, cotton, wool, and manufactures of iron and steel are imported.

Cities. LISBON is the capital and largest city. It is on the Tagus River at its mouth, which affords a splendid harbor. It is about 400 miles by rail from Madrid, and much freight marked for the capital of Spain is landed at Lisbon.

Lisbon manufactures cotton and woolen goods, which



The fish market, Lisbon, Portugal.

are exported to the Portuguese possessions in East and West Africa, and Asia.

OPORTO is the chief place of export for port wine, which takes its name from the city.

Government. Portugal is a republic.

Questions

1. How far is Oporto from Lisbon?
2. What advantages have the ports of Portugal over those of Spain?
3. Why is the railway route from Lisbon to Madrid more direct than that from Seville to Madrid?
4. Is Portugal in east or west longitude?

Exercise

Write a description of Portugal.

CHAPTER XI

ROUMANIA AND THE BALKAN PENINSULA

ROUMANIA

Location. Roumania extends from the Black Sea to the Hungarian plain and the Carpathian Mountains, and most of the country lies between the Danube and Dniester rivers.

Size, Surface, Drainage. Roumania is about as large as Illinois and Iowa, but with twice their population. Nearly half of Roumania is plain and steppe, the larger part of which is drained by the Danube and its tributaries. The Transylvanian Alps lie within Roumania, and the country includes part of the Carpathian range. A small strip of the Hungarian plain west of the mountains belongs to Roumania. The Danube forms a highway from its delta on the Black Sea to central Europe. The rapids on the Danube at the Iron Gate, where the river passes through the gorge in the mountains, lie on the boundary between Roumania and Yugoslavia. The delta is swampy, and it is also marshy where the Danube flows northward. The plain is very fertile and well adapted to agriculture.

Climate. The eastern part of Roumania has a climate like the great plain of the Ukraine, which lies on the opposite bank of the Dniester River, and is hot in summer and cold in winter. The climate is very variable in the mountains. The rainfall is not heavy anywhere in this region although it is about twenty inches per year in the great plain.



Products. The plains produce great crops of grain, the mountains are covered with large forests, and petroleum, salt and lignite are taken from below the surface. Glass making is an important industry.



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Bucharest, Roumania.

People. The people are partly Slav but also claim descent from the ancient Romans, from whom the name of their country is taken. The language spoken is somewhat like Italian. The population is not all Roumanian. There are a considerable number of Turks in the southeast, Magyars in the north and west, and smaller numbers of Bulgarians, Russians and Germans in various parts of the country.

Roumania is a constitutional monarchy.

Cities. BUCHAREST is the capital and chief city. It has many fine buildings.

GALATZ, on the Danube, near its delta, exports grain.

Questions

1. On what sea does Roumania have a coast?
2. In what direction is most of Roumania from the Danube River? Is it on the right or left bank?



A festival in Roumania.

3. Where are the Transylvanian Alps? Where are the Carpathians? In what direction is Roumania from the Balkan Mountains?

4. To what peoples are the Roumanian people related?

5. What parts of Roumania are drained by the Danube and its tributaries?

THE BALKAN PENINSULA

Location. The Balkan Peninsula extends southward from the Danube and Save rivers between the Black and the *Æ*gean seas on the east, and the Adriatic and the Ionian seas on the west.

This peninsula is very broad in the north. From the southern extremity the irregular Grecian Peninsula extends as a secondary smaller peninsula. Between the Balkan Peninsula and the peninsula of Asia Minor lie the straits of Bosporus and Dardanelles and the narrow Sea of Marmora.

The Dardanelles is the ancient Hellespont. According to a Grecian fable, the youth Leander swam across the strait to meet the maiden named Hero. Lord Byron, the English poet, performed the same feat. As the Dardanelles at the point where he swam is but one and a quarter miles wide, the danger is less from distance than from the swift and eddying current. Near this point the Persian king, Xerxes, bridged the strait with boats in an attempt to invade Greece.

Surface. The peninsula is mountainous. The Dinaric Alps, extending from north to south, and the Balkan Mountains, from which the peninsula takes its name, extending east and west, are the chief ranges. The Grecian Peninsula is covered with intersecting mountain ranges.

Climate. The climate of the southern part is moderated by the bordering seas. Along the Adriatic the rainfall is abundant, but it is less in the interior and slight in the eastern part.

Upon the plateaus in the broad northern expanse of the peninsula, the climate is continental—rigorous in winter and warm as that of Italy in summer.

Countries. Yugoslavia, Albania, Bulgaria, Greece and Turkey in Europe occupy the Balkan Peninsula, in whole or in part. The two latter countries are republics.

Questions

1. Which extends farther north, the Balkan Peninsula or the Iberian Peninsula? What is the southern latitude of each?
2. In what respect are the climates of these peninsulas alike? Why?
3. Which peninsula has the longer land boundary?
4. How many countries are there on each of these peninsulas?
5. Where is Mt. Olympus?

YUGOSLAVIA

Yugoslavia extends beyond the Balkan Peninsula into continental Europe. It is about as large as the state of Oregon, and its population is a little more than that of New York State. It includes the former countries of Serbia and Montenegro, together with large parts of the former Austria-Hungary.



A village of Yugoslavia on the Danube.

Physical Features. Yugoslavia is a mountainous country. The Dinaric Alps rise abruptly from the shore of the Adriatic, and the coast line itself is irregular and bordered by rocky islands. The climate is extreme; the summers are hot, and the winters are very severe. Earthquakes are not uncommon.

Products. Copper, coal and iron are found, but the mines are as yet undeveloped. Along the Danube are

vineyards and orchards. Plum trees are grown, and the dried fruit, prunes, is exported. Indian corn, or maize, is the principal crop. The eastern mountains are covered with forests, in which oak, beech and walnut trees abound. Here live stock, especially hogs, are herded, feeding upon acorns and beechnuts. Farther inland, where it is drier, there are Alpine pastures in which sheep and cattle may graze.

Carpet weaving is a very important industry, the recipes for the colors used being handed down from one generation of weavers to another.



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Belgrade, Yugoslavia.

Commercial Facilities. The natural harbors of Yugoslavia on the Adriatic are of little value, as they are cut off from the interior by the mountains. Fiume, the natural port for Yugoslavia, has been made a free city, in which Yugoslavia has certain rights to the harbor. There is commerce on the Danube and Save rivers. There are railroads to Fiume, and to Salonica in Greece, on the Ægean. A railroad of less importance runs to Ragusa on the Adriatic. In many districts great carts drawn by oxen or buffaloes are the only means of transport.

People. The official name of the country which we call Yugoslavia is the "Kingdom of the Serbs, Croats and Slovenes." These people, who are southern Slavs (Yugo means south), are all closely related in language, customs and national interests. The greater part of the population is of the peasant class. The Yugoslavs are fond of comfort and amusement, and the national costume of scarlet and white is very striking. Many of the people emigrate.

Cities. BELGRADE, the capital and chief city, is situated on the Danube River, and is connected by rail with Constantinople and Budapest. It manufactures carpets, arms, saddles and harness, and is an important center for the commerce of the valley of the Danube. There are no very large cities in Yugoslavia.

Questions

1. What important river flows through Yugoslavia?
2. Why is Belgrade advantageously located for trade?
3. What country lies across the Adriatic from Yugoslavia?
4. Why are rights to the harbor of Fiume important to Yugoslavia?

ALBANIA

Albania borders the Adriatic Sea between Yugoslavia and Greece. The country is very mountainous.

The people are not only sturdy and independent highlanders, but many of them are inclined to lawlessness. Deadly feuds prevail between rival families, and bands of brigands sometimes carry off wealthy travelers and hold them for ransom. Hence the rich mines and forests remain undeveloped. There are no railroads, and education makes but little headway. Most of the Albanians are Mohammedans.

The chief exports are hides, wool, olive oil, grain, and



Carting melons to market in Albania.

such forest products as charcoal and sumac leaves. The latter are used for tanning leather and making dyes.

TIRANA is the capital. **DURAZZO** is the chief seaport. In ancient times it was a prosperous seaport, but the harbor has become obstructed by mud, the palaces have fallen into ruins, and there is little to remind the visitor of its former greatness.

Questions

1. What lake lies between Yugoslavia and Albania?
2. Opposite what part of Italy does Albania lie?
3. What sort of people are the Albanians?

BULGARIA

Location. Bulgaria extends from the southern bank of the Danube almost to the Ægean Sea, and from the Black Sea more than halfway across the Balkan Peninsula.

Size, Surface. It is about three fourths as large as New York, but has less than half as many inhabitants. The northern and southern slopes of the Balkans occupy the central part of the country, and the northern part con-



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Laundering clothes, Sofia, Bulgaria. The stream is a tributary of the Danube.

sists of a plateau extending northward from the mountains to the Danube, where it terminates in steep banks, contrasting with the plains of Roumania on the other side of the river.

Products and Pursuits. The plateau region is devoted to the growth of grain. In the mountains sheep and goats are raised. The warm southern slope produces cotton and fruits. Wine is made and silkworms are raised. Large fields of roses are cultivated and the oil, or attar, is extracted. It is used as a perfume, and is highly prized in Oriental countries.



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Making attar of roses, Bulgaria.

SOFIA is the capital. It is south of the Balkans, and is connected with Belgrade and Constantinople by rail. It has the largest theater in southeastern Europe.

People. Most of the Bulgars are farmers. They are patriotic and strive to be free of all interference by the Great Powers in Balkan affairs.

Questions

1. Which European countries are in the same latitude as Bulgaria?

2. Which is greater, the distance from 40° N. to the southern boundary of Bulgaria, or to the northern boundary of Portugal? What does this show as to the latitude of the two countries?

3. In which direction does the greater extent of Bulgaria lie?

4. Is Bulgaria on the right or left bank of the Danube?

5. How do the coast lines of Bulgaria and Roumania compare in length?

TURKEY

Turkey has lost the greater part of its European possessions within the past century ; a hundred years ago its sway extended over Roumania and the whole Balkan Peninsula. Turkey in Europe is now confined to the city of Constantinople and a few thousand square miles to the west. The rest of the territory which belongs to Turkey is in Asia Minor.



Mosque of Sultan Ahmed, Constantinople, Turkey.

The Turks claim control of the waterway which consists of the Sea of Marmora, the Bosphorus and the Dardanelles. This waterway gives access to the Black Sea and the ports of southern Russia. The Great Powers desire to have these waters kept open to the commerce of all nations.

The Turks are an Oriental people, who profess the Mohammedan religion and follow the customs of Asia, rather than those of Europe.

Cities. CONSTANTINOPLE is one of the large and important cities of the world. It is situated on the hills which overlook the Bosphorus and the Golden Horn, the most beautiful harbor in Europe, where ships of all nations may be seen at the moorings. It is connected with Paris by rail. The capital of Turkey is ANGORA, which is situated in Turkey in Asia.

Constantinople derives its importance from the fact that



The harbor of Constantinople, Turkey.

its harbor and the waters leading to it are deep enough to admit the largest vessels, and from its location at the crossing of land and water routes which have been traversed from the earliest times between Europe and Asia. The name means City of Constantine.

The finest building is the mosque, originally a Byzantine church, of St. Sophia. The quarters where Europeans live have the appearance of a modern city; in other parts the squalid quarters of the poor adjoin the palaces of the wealthy.

Questions

1. How large is Turkey in Europe?
2. Why is Constantinople important?
3. To what four countries is commerce through the Bosphorus and Dardanelles especially important, and why?

GREECE

Greece is the oldest nation of Europe, the birthplace of our civilization. While the rest of Europe was still inhabited by barbarous tribes, the Greeks had cities,



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The Stadium at Athens, Greece. In this great modern arena athletes of all nations compete for physical supremacy.

towns, well-tilled farms and a great commerce. They were a learned people, and many of them were great orators, poets and scholars. The ruined temples and statues of ancient Greece show that they were great artists. They recognized the value of physical strength and beauty, and developed them by foot races and other exercises in the open air.

The Greeks were conquered by the Romans, and long afterward by the Turks. Under Turkish dominion Greece was reduced to abject servitude and political

ruin. In 1830, with the help of the greater European powers, it won its independence from Turkey and formed a constitutional monarchy; in 1922 it became a republic and is once more progressing rapidly.

Surface and Coast. Greece is a secondary peninsula of the Balkan Peninsula. It extends southward between the Ionian and *Æ*gean seas, and includes many mountainous islands in those seas. Greece is so rugged that the land cannot be easily cultivated. The mountains extend in various directions, so that, with the sinking of the land, the coast became very irregular. It has more coast in proportion to its area than any other country in the world. A ship canal built through the Isthmus of Cor-



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The Corinthian Ship Canal.

inth cuts Greece in two. Every part of Greece is so near the sea that the Greeks are a nation of sailors. Greek mariners carry on a large part of the commerce of the Mediterranean countries east of Italy. That region is known as the Levant.

Crete is the third largest island in the Mediterranean Sea. It was the home of a very ancient civilized people, but was taken by the Greeks about three thousand years ago. It has many ancient ruins, among them the Labyrinth. In this maze, according to an old Grecian fable, a monster called the Minotaur, half man and half bull, made his abode. Crete was freed from Turkey and in 1912 it was annexed to Greece.

Greece includes nearly all the islands in and about the *Ægean* Sea, with the exception of Rhodes. Besides the peninsular part of Greece, the country extends eastward along the northern coast of the *Ægean* Sea, to the Maritaza River.

Climate and Products. The climate of Greece is warm, and in winter there is a moderate rainfall. In summer, however, there are long rainless periods when the farmer is obliged to resort to irrigation in order to carry on his farming.

Grains, tobacco and fruits are raised. Olives and a small seedless grape are the chief products. Oil is pressed from ripe olives, and some of it is used in making soap. The grapes are cured and dried and are then called currants, the name being derived from Corinth. Many sheep are raised on the uncultivated, rugged highlands. There are important mines of iron and other ores.

The United States exports cotton, petroleum and machinery to Greece, and Greece exports currants and olive oil to the United States.

Cities. ATHENS, the capital, is noted for its remarkable ruins. On the Acropolis, a gigantic flat-topped, steep-sided rock, stand the ruins of the Parthenon, a temple dedicated to Athena, the goddess of war and wisdom, and the protecting deity of the ancient city. It contains statues and columns remarkable for their beauty, and was itself the triumph of Greek architecture. The Elgin

marbles, now in the British Museum, include the beautiful bas-reliefs taken by Lord Elgin from the frieze of the Parthenon.

SALONICA, the second city of Greece, is an important seaport. It manufactures textiles and leather. KANEA is the chief city of Crete.



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The Acropolis, Athens, Greece.

People. The Greeks of to-day are well educated. Shrewdness is their chief characteristic, and contributes to their success as business men. Many Greeks have emigrated to America, where they have settled in the cities as merchants and as venders of fruit.

Questions

1. What countries border on Greece?
2. In what direction are they from Greece?
3. What part of Spain is directly west of the southern extremity of Greece?
4. What sea is west of Greece?
5. What sea is east of Greece?

Exercise

Write a description of Greece.



Blowing an Alpine horn, Switzerland.

CHAPTER XII

SWITZERLAND

Switzerland is the favorite summer resort of Europe. The beauty of the mountains and lakes, the quiet and freshness of the valleys, and the grandeur of the rugged, snow-capped mountain peaks, together with the delightful climate, lure thousands of tourists yearly from all parts of Europe and America.

This very important country has only one third the size and population of New York State.

Surface. Switzerland is the most mountainous country of Europe. It is traversed and bordered by the Alps. The Jura Mountains form the western boundary (p. 130). Between the Alps and the Juras is the plateau region of Switzerland, which comprises about one third of the surface. In the high valleys of the Alps, snow, accumulating from year to year, has formed glaciers. They move at the rate of a few inches a day.

Lake Geneva, Lake Constance and Lake Lucerne are unsurpassed for beauty. Lake Lucerne is surrounded by lofty mountains. A fine road around it has been cut in the rocks. Near this lake is the world-renowned Rigi, from whose heights the villages below look like toy villages. In climbing the Rigi the tourist's ear is greeted with an orchestra of bells, which hang from the necks of



Lake Lucerne and Mt. Pilatus.

thousands of cattle feeding on the slopes. In Lucerne small silver bells, modeled after cowbells, are sold in the shops.

The Matterhorn, in southern Switzerland, has such a sharp, steep-sided peak that, despite its altitude, it is not capped with snow.

Between Mt. Blanc, the highest of the Alpine peaks, and the Matterhorn, is the Great St. Bernard pass. At the top of this pass the Hospice of St. Bernard is situated. The monks who manage this institution equip their dogs with blankets, brandy and food so that in case they

meet some exhausted traveler who has lost his way, he may be enabled with the help of the dogs to find his way to the Hospice. Many travelers have been saved by these intelligent dogs and their noble masters.

Questions

(Turn to the maps, pages 6 and 130.)

1. What countries border on Switzerland?
2. In what direction is Switzerland from each?
3. Which of the Great Powers do not touch Switzerland? In what direction is each from Switzerland?
4. How far is it from Switzerland to the nearest sea coast?
5. What obstacles lie between?

Exercises

Trace four natural water routes from Switzerland to the sea. State the direction of each course, the country or countries through which it passes, and the sea into which it leads. Mark these routes on a sketch-map.

Climate. In Switzerland there are six belts of climate, varying in temperature with the altitude, from almost subtropical to frigid. The lofty Alps are directly in the path of the westerlies; hence Switzerland is well watered. Rainfall in the form of snow is greater here than anywhere else in Europe. Huge masses of snow sometimes slide down the mountains, burying villages and people. These snowslides are known as avalanches.

Products and Pursuits. Although Switzerland is very rugged, agriculture and dairy farming are the principal industries. In the warm valleys near Lake Geneva grapevines and mulberry trees are cultivated. Grain is raised on the central plateau.

In the uplands great herds of cattle are reared. With the approach of spring the cattle are turned out,



The Jungfrau, a famous peak of south central Switzerland.

and as the season advances and the snow-line recedes, they keep traveling upward in search of the sweet herbage which gives Swiss milk and cheese their delicious flavor. The herdsmen have picturesque cottages on the mountain sides. They are built of rough logs and covered with a low overhanging roof, weighted with large stones to prevent its blowing away. The mountaineers practice a peculiar song with many falsetto notes called a "yodel." The Alpine horn is used to call the flocks and herds.

Switzerland is poor in minerals and lacks coal and iron, yet manufacturing is well developed. Water power, by means of which electricity is generated, has taken the place of coal. Switzerland manufactures textiles, embroideries, jewelry, clocks and watches and musical instruments.

There are numerous hotels, which receive millions of dollars every year for entertaining travelers. A great number of Swiss lads are engaged as guides by the tour-

ists. The edelweiss, a white, felt-like, star-shaped flower, which grows in the snow at a very high altitude, is gathered and kept for sale in the market places.

Commerce. Switzerland is centrally located for commerce, but the mountains are natural barriers. Switzerland is artificially connected with the adjoining countries by improved roads through the mountain passes and by well-constructed tunnels. A tunnel through St. Gotthard connects Switzerland with Italy. The Simplon tunnel, connecting the same countries, and twelve miles in length, is the longest tunnel in the world. Much of the commerce is through Switzerland rather than with it.

Swiss trade is mainly with Germany, France, Italy and Great Britain. Her chief imports are grain and raw material for manufacturing. To the United States are exported cheese, condensed milk, clocks and watches and embroideries. In return we send Switzerland raw cotton, iron and steel goods.

Cities. GENEVA is located on the Rhone River where the river flows out of Lake Geneva. It has excellent water power, and has become a great manufacturing center. Its factories turn out music boxes, clocks, scientific instruments and jewelry. Geneva is a great educational center and the headquarters of the League of Nations.

ZURICH, the largest town, is especially fortunate in its location on Lake Zurich. It is within easy access of Europe's most important countries, and is noted for silk and cotton manufacturing, and for its university. Pestalozzi, a great Swiss teacher, was born there.

BERN, the capital, is a quaint city, headquarters of the International Postal Union. To the tourist the bear-pit is interesting. Bern means bear, so bears are always kept in the city, and small bears, carved out of wood, are sold in the shops.

LUCERNE is a railway center, frequented by tourists.

Government. Switzerland is the oldest republic in Europe. The twenty-two cantons or States are represented in the National Congress. This body makes laws and elects the president.

Switzerland has been declared neutral territory by the Great Powers. There is no standing army, but every man has to serve in the militia, and is given military training and practice with arms. The frontiers are always guarded by militia. In former centuries Swiss soldiers, noted for bravery, were often hired by foreign princes. To commemorate the valiant defense of the French monarch, Louis XVI, by a Swiss guard of eight



The Lion of Lucerne. The fleur-de-lis of France is upon one shield; the Swiss cross upon the other.

hundred in Paris, an immense lion was carved by the Danish sculptor, Thorvaldsen, in the rocky walls of cliff-bound Lucerne.

People. There is no distinct race of Swiss people. Some are German, some are Italian and some are French.

The spirit of liberty has always been strong among the Swiss in their mountain fastnesses. A stirring legend is told of William Tell. Because he would not submit to the rule of Gessler, the Austrian governor, Tell was ordered to shoot at an apple placed upon his son's head. He afterward shot Gessler in revenge for this and other wrongs.

Switzerland has fewer vagabonds and poor people than the other countries of Europe. Through thrift, education and diligence the Swiss have become the most generally prosperous middle-class people of Europe.

Questions

1. In what part of Switzerland is Geneva?
2. How near is it to the French border?
3. What river flows through Lake Geneva? (Page 93.)
4. In which direction is Lake Lucerne from Bern?
From Zurich?

Exercises

Write an account of an imaginary ascent of a mountain in Switzerland.

Give an account of Switzerland.

CHAPTER XIII

BELGIUM

Belgium is the home of an intelligent, industrious and prosperous people who, by the variety of their manufactures, have won for their country the name of "The Workshop of Europe." Belgium is on the North Sea, opposite the south of England. It lies north of France. (Map, page 70.)

Size. Belgium is less than one fourth the size of the State of New York, but more than seven million people inhabit it. It is the most densely populated country of the world. The Belgian Congo, in Africa, is a colony of Belgium.

Surface. Western Belgium dips below the level of the sea, where large sand dunes on the coastal plain help to keep back the water. Because of the low coast the mouths of the streams are diked, and some land has been reclaimed from the sea. From the coast the surface rises gently in low rolling plains toward the southeast, where the surface is hilly, rocky and even mountainous.

Climate. The westerlies bring moisture and a mild climate to Belgium. On account of its altitude, eastern Belgium has more rainfall than the coast.

Products and Pursuits. Farming and manufacturing are of equal importance. On the coastal plain sheep, cattle and horses are raised. Flemish horses, famed for their strength, are exported to many other countries.

The farms are small, comprising only a few acres each, but they are models of close cultivation. Every farmer



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A milkwoman in her dog cart, Brussels, Belgium.

confines himself to the cultivation of a few things, and in this way becomes acquainted with the best method of raising them. Grain, beets, potatoes, and the best flax in the world are the chief products.

The worn-down mountain regions are rich in forests and minerals. Coal and iron, being found close together, have helped to make Belgium a great manufacturing country. Cotton, wool and linen textiles, iron, steel and glass articles are manufactured. The making of lace is an important occupation.

Fishing is an important industry.

Commerce. The location of Belgium, on the western coast of Europe, where the commerce of the world is centered, is favorable to the development of its trade. The facilities for domestic commerce are equally good. The

railways of Belgium are connected with the great continental lines of Europe, affording direct communication with all the important capitals. There are numerous canals. The Scheldt is the principal river. Its upper course is regulated by locks, and its mouth is in the Netherlands. Most of Belgium's trade is with England, Germany and France, to which rubber goods, ivory, glassware and linen are sent. Coal is sent to the manufacturing cities of France.

The United States supplies Belgium with cotton and petroleum. Laces, carpets and horses are shipped to the United States from Belgium.



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The Palace of Justice, Brussels, Belgium.

Cities. BRUSSELS, the capital and metropolis, is comparable with Paris in beauty, though only about a fourth as large. It has fine art galleries, museums and schools, and great factories where carpets and lace are made. Not far from Brussels is the famous battlefield of Waterloo, where, in 1815, Napoleon met at the hands of the English and their allies a defeat all the more terrible because unexpected.

ANTWERP, located about sixty miles inland on the deep estuary of the Scheldt, is the greatest commercial city of Belgium. It maintains lines of steamships to West Africa, the West Indies and the East Indies. As Hamburg transports goods for Austria, so does Antwerp for part of Germany. Laces are made there. Distilling, sugar refining and shipbuilding are occupations of importance. Antwerp is the greatest ivory market of the world. Ivory and rubber are brought from the Belgian Kongo in Africa.



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Antwerp, Belgium.

Antwerp is an old city and contains many interesting buildings, paintings and museums.

OSTEND is the second seaport of Belgium. It is in direct communication with Dover, England, and with Germany and Switzerland. Situated on the shelving, sandy shore, which permits sea bathing, it is the chief among



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Ostend, Belgium, a fashionable seaside resort.

many seaside resorts. It is visited by many fashionable Europeans.

LIEGE is in the coal region, and is engaged in the manufacture of firearms.

GHENT is in the center of the flax-producing section. It manufactures this product, as well as imported cotton, into cloth and laces.

Government and People. Belgium is a limited monarchy. It is wedged in between Germany and France; England lies across the narrow Strait of Dover. On account of its small size and small army Belgium could not alone resist any one of these huge neighbors. But because it is a buffer between them, each of the rival nations has sought to protect Belgium from the others. The independence

of Belgium is especially important to England because the permanent possession of Belgium by Germany would threaten the British control of the Strait of Dover.

Instead of supporting a large army the Belgians have devoted their revenues and energies to the development of industry, and are among the most cultured people in Europe. As in Switzerland, different languages are spoken. In the north of Belgium most of the people speak Flemish, a language which resembles Dutch; in the south most of the people speak French.

Questions

1. What countries border on Belgium?
2. Which country is farther north, Belgium or Switzerland?
3. What section of France does Belgium adjoin? On which part of France does Switzerland border?
4. How far is Brussels from Paris? In what direction?
5. How far is Brussels from Cologne? In what direction?

Exercise .

Trace a journey by rail from Brussels to Rome. Mention the cities through which you would pass, and state some fact of interest about each.



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A canal and windmills, Holland.

CHAPTER XIV

THE NETHERLANDS

The Netherlands, or Holland (map, page 70), is a country of extremely flat lands, windmills, ditches, canals and dikes.

Surface. It is the west end of the great plain of Europe, and is formed by the detritus of the Alps and some French and German mountains, brought by the Rhine, Meuse and Scheldt. Much of the land is below the level of the sea ; therefore, the Dutch have built great walls to shut out the sea and to keep the rivers from flooding the land, which lies lower than the rivers near their mouths. These walls, or dikes, as they are called, need to be very strong to resist the heavy blows of ocean waves. Some of them consist of parallel walls made of imported stone filled in with crushed stone and sand. Some are thirty feet high and six yards wide. The tops of some dikes are used as streets and roads ; they have a central passage for vehicles and side paths for pedestrians. These are shaded by large trees, which have been placed there for the purpose of strengthening the dikes by their interlacing roots. Along the coast and rivers there are about sixteen hundred miles of dikes, which have to be con-

stantly watched and kept in repair, for a tiny leak might lead to terrible disaster. The government spends enormous sums each year for the maintenance of its dikes. The citizens are ever watchful for defects in the sea-wall, and at the sound of a great bell every citizen hastens to assist in averting the great danger of inundation.

Holland presents strange spectacles. Ships are sometimes moored higher than the roofs of the city, and the storks perched on the chimney-tops are often lower than the frogs and fish which are their prey. One wonders how it happened. The explanation is that one third of the Netherlands has been reclaimed from the sea. Ever since the twelfth century the Dutch have tirelessly wrested acre after acre from the embrace of the ocean, and even now the work is being continued along the Zuider Zee. This sea averages only twenty feet in depth, and it is the dream of the Dutch nation to change it all some day into polders, as the reclaimed flats of clay and sand are called. First, great walls are built into the water around the desired area; then the water is pumped out and forced into the ditches and canals which drain the land. Holland has abundant rain, which often collects in the low areas because the ground is saturated. For one reason or another, pumping never stops in Holland.

Most of the surface is flat. Sand dunes, blown up by the wind, and glacial hills, called drumlins, break the monotony of the level surface, but they are few in number. The prevailing westerlies, unobstructed, blow steadily and strongly over the land. As Holland has little coal, and its streams are too sluggish to furnish water power, the Dutch have harnessed the powerful winds, which blow almost incessantly, to the pumps, without which the country cannot be kept dry. Windmills have been built in the towns and cities and on the farms. Some steam pumps have been introduced.



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Scene on the polders, Holland.

Size and Population. Though Holland has wrested so much land from the sea, it is still a tiny country. However, it is rich in colonial possessions in the East and West Indies and South America. The total area of these possessions is sixty times as great as that of the Netherlands proper.

Products and Pursuits. Farming, gardening, dairying, fishing and manufacturing are the leading industries of the Netherlands. The farms yield cereals, potatoes, sugar beets and other vegetables. The Dutch are great gardeners, and have had remarkable success in the culture of tulips, hyacinths, gladiolas, and other bulbs and plants. At one time the Dutch had a craze for tulip culture, and cared so much for queer varieties that single bulbs of rare kinds sold for as much as three hundred dollars each.

Holland is noted for its excellent milk. The cows receive better care than in other dairying countries. They receive a cold bath daily, and in the middle of the day they can be seen on the polders feeding from boxes of food prepared by the farmers, which they know will produce richer milk than will grass alone. The barns, too, are scrupulously clean, being scrubbed daily, ceilings, walls, and all. Before milking, the cow's tail is tied to a hook on the ceiling so that she cannot whisk dust into the milk. There is a great demand throughout Europe for Dutch butter and cheese, on account of their richness and flavor.

Holland, with little coal or water power, lacks the resources which usually produce a great manufacturing nation. The need of farming implements and mechanical devices for pumping, forced the Dutch to start manufacturing, which now ranks next to agriculture in importance. Coal and iron are brought by canal from Germany and Belgium. Porcelain, silk, cotton and woolen goods are manufactured.

The Dutch who dwell along the coast are expert fishermen, and secure great quantities of herring and oysters.

Commerce. Holland carries on an extensive commerce. It contains the delta of the Rhine, which is navigable to Mannheim, and this has helped to build up its commerce. It controls the delta of the Scheldt, and thus the commerce of Antwerp, in Belgium, passes through the Netherlands. Then, too, the canals and ditches present easy avenues for internal trade. Along the smaller canals it is not unusual to see canal boats, loaded with grain or coal, drawn by women walking on the towpath. Holland has railways directly connected with European trunk lines. In winter, when the canals are frozen, everybody goes to and from work on skates, and great sledges carry merchandise.

Much of Holland's trade is with its colonies. From them it receives coffee, tea, gums, spices, diamonds, dye-woods and tobacco, which are afterward shipped to other ports. Cotton goods are sent to the colonies. Butter, meat and cheese are sent to Germany and England. Diamonds, tin, cheese, bulbs and plants, such as azaleas and roses, are sent to the United States. Cereals, tobacco and meat products are our exports to Holland.



The Peace Palace in the Hague, Holland, given by Andrew Carnegie for the use of peace conferences.

Cities. THE HAGUE, with its steep roofs and towers, is a delightful little capital. The streets are broad, shaded and clean. There is no noise or hurry, and yet the place is busy. The Queen resides there most of the year. The Houses of Parliament and the Mauritshuis, a picture gallery, are among the most interesting buildings. Andrew Carnegie has donated a building for holding peace con-

ferences. The Hague is the meeting place of a body of men from all nations who advocate peaceful arbitration instead of war for settling all disputes among nations.

AMSTERDAM is the constitutional capital of the Netherlands. The kings and queens are crowned there. The



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A canal in Amsterdam, Holland.

Ryks Museum, containing famous portraits by Rembrandt and Van der Helst, is the greatest attraction. Diamond cutting is an important industry. Amsterdam is built on something less than a hundred islands, connected by about three hundred bridges. It is connected with the ocean by a canal. It is the coffee and spice port of Holland.

Here the Pilgrims who came to America in the Mayflower assembled for worship before they went to England. Delftshaven is now a part of Rotterdam.



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The church at Delftshaven, Holland.

DELFT, very near the Hague, has a bridge and canal in every street. The clay deposits near Delft being especially fine, the city has become famous for its china, which is dark blue, and ornamented with scenes of canals and windmills. In Delft the storks are as great pets as are the bears in Bern.

ROTTERDAM is the chief seaport of the Netherlands. German and English goods are transferred there. The Holland-America Line has docks at Rotterdam.

HAARLEM has a great trade in flowers, seeds and bulbs.

Government. Holland is a limited monarchy. The people elect the members of the States-General, the Dutch parliament, and thus have a share in making the laws and regulating the expenses of the government.

People. The Dutch are patient, strong, industrious, self-reliant and scrupulously clean. They are somewhat reluctant to adopt innovations. Men in full knee-trousers and women in short skirts and white caps are seen in the city streets. Many Dutch people have adopted the costumes common to modern Europe and America.

Questions

1. Which has the longer sea coast, the Netherlands or Belgium? The Netherlands or Denmark?
2. Why is part of the Netherlands represented in purple color on the physical map of Europe? (Page 14.)
3. Which division of Great Britain is in the same latitude as the Netherlands? Which is the larger?
4. What language is spoken by the people of Holland?
5. Why was the capital of the Netherlands selected for the place of meeting of the International Peace Conference, instead of the capital of one of the six Great Powers?

CHAPTER XV

DENMARK

Denmark, a country without important hills or rivers, occupies the northern part of the Peninsula of Jutland and the group of islands to the east, which almost close the entrance to the Baltic Sea. Greenland and the Faroe Islands, north of Scotland, belong to Denmark. Iceland has the same king as Denmark and is united to Denmark by other ties. The German ship canal between the North and Baltic seas has severed the Peninsula of Jutland from the mainland of Europe.

Climate. The climate is temperate, with abundant rainfall and frequent fogs.

Products and Pursuits. Farming, fishing, stock raising and shipbuilding are the leading industries. Cereals, potatoes and sugar beets are the principal crops. Horses, cows and sheep are raised.



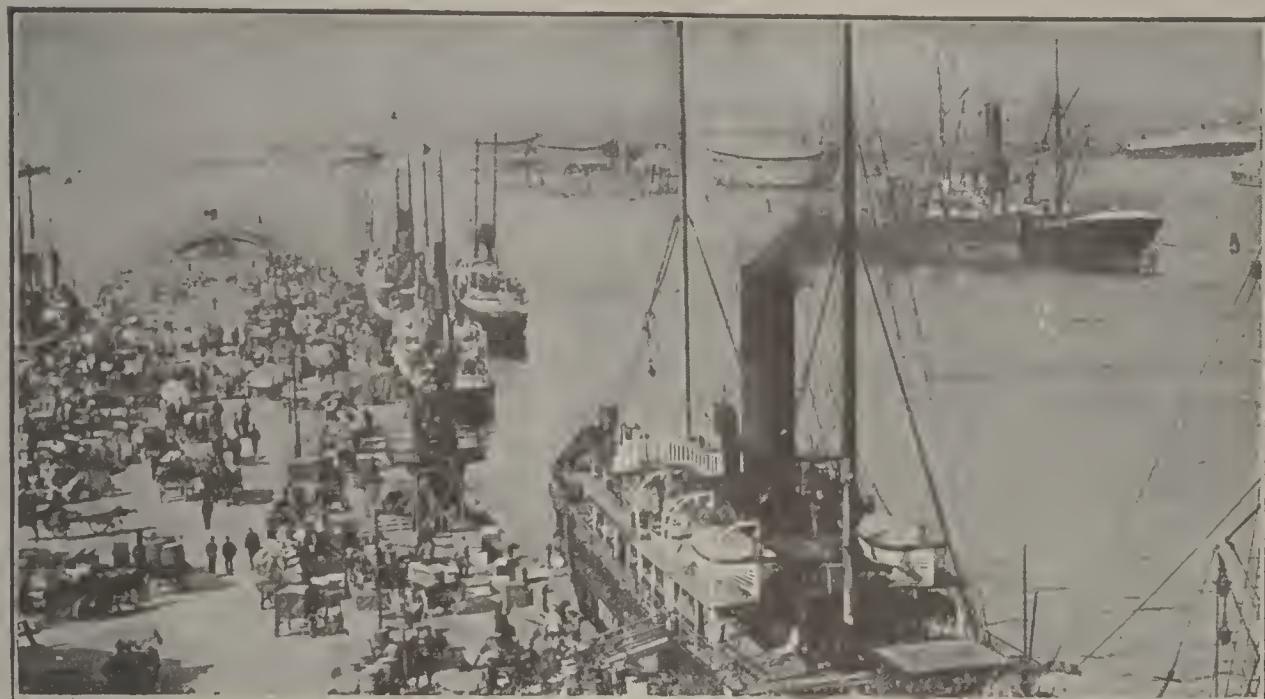
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The interior of a cheese factory, Denmark.



Denmark is the great dairy of northern Europe. To Great Britain alone, \$50,000,000 worth of butter is exported yearly, and butter is sent to all out-of-the-way places of the world. Animals, wool, hides and eggs are exported. Coal, textiles, foodstuffs, wood and machinery are the most important imports. Hides, wool, provisions

and rennet are sent to the United States. Grain and oil-cake are received from the United States.

Cities. COPENHAGEN, which means merchants' harbor, is situated on the island of Seeland. When the Danes owned what is now southern Sweden, and thus controlled both sides of the strait, toll was asked of ships on their



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Harbor of Copenhagen, Denmark.

way to or from the Baltic. Copenhagen was the toll-gate upon the narrow ocean highway, where ships from all over the world made a short stop. Copenhagen owes its growth to the intercourse with other people which this system of tolls compelled. The streets of Copenhagen are narrow, but well paved and clean. The Thorvaldsen Museum is an interesting place, containing many sculptures by Thorvaldsen. In it is a bronze statue of Hans Christian Andersen, the great Danish writer of beautiful fairy tales, which have endeared him to all readers, young and old. Other statues by Thorvaldsen adorn public squares and churches. There are excellent schools, and the University of Copenhagen enjoys a high reputation.

ELSINORE, or HELSINGOR, also in Seeland, is the scene of Shakespeare's great play of "Hamlet."

The Danes are an intelligent people, honest in all their dealings. They are fearless sailors, and have penetrated far into the North Polar regions, where they control Greenland.

ICELAND

Iceland is a sovereign state, under the Danish king.

Iceland historically belongs to Europe. It lies far to the north, and was in the pathway of the early Vikings, who discovered Greenland and the Atlantic coast of North America centuries before the time of Columbus. Iceland is the most western land of Europe, but it is so far north that it is out of the way of transatlantic steamship lines which ply between Europe and North America.

The surface consists of volcanic rocks. There are more than one hundred volcanoes, of which many are active. Mt. Hekla is the most important. Injurious earthquakes occur frequently. There are many springs which spout hot water from time to time. One of these is called the Geyser, and from it all springs of that kind derive the name by which they are commonly known.

The climate is wet and stormy, but the cold is moderated by the surrounding water. The pasturage is excellent, and sheep are raised. The shallow waters around Iceland are important fishing grounds, visited by the fishing fleets of Europe. Whales and seals are plentiful. The eider duck, which is much larger than the common duck, is very numerous and almost domestic. It is valued for the eider down, or soft feathers, which it plucks from its breast to line its nest. This down is very light and warm, and is exported in large quantities to be made into coverlets, robes and similar garments.

The inhabitants live chiefly on the coast.

REIKIAVIK, the capital of Iceland, is the only large town and seaport. Exports are eider down and feathers,



Reikiavik.

and the products of the sheep farms and fisheries. There is in Reikiavik a statue of the great Danish sculptor, Thorvaldsen, who was the son of an Icelandic wood carver living in Copenhagen.

Questions

1. Name the countries every part of which is farther north than the Peninsula of Jutland.
2. Which countries have some part lying farther north than Jutland?
3. What Danish island group is located in European waters?
4. How does its latitude compare with the latitude of Denmark?
5. Which meridian separates the Eastern from the Western Hemisphere?
6. Is Iceland chiefly in the Eastern or the Western Hemisphere?
7. What other European island is the size of Iceland?

CHAPTER XVI

SCANDINAVIA

Location, Size, Population. Scandinavia is a great peninsula in the northwestern part of Europe. In a grand division of extensive peninsulas it is the largest. It is occupied by two kingdoms, Norway and Sweden.

Next to Russia, the Scandinavian countries cover more degrees of latitude than any other country of Europe. Norway is often spoken of as the "Land of the Midnight Sun," but this name can be applied with accuracy only to the region within the Arctic Circle. At the southern boundary of the North Frigid Zone there is one day in summer when the sun never sets, and in winter there is one day when it never rises. As one goes farther north the number of days during which the sun remains above the horizon increases, and there is a corresponding period of continuous night in winter. The shortest night in Bergen, Christiania and Stockholm consists of about five hours of twilight.

Because of the severe climate and small resources, Scandinavia, in spite of its great size, has fewer people than have much smaller areas in the more favored parts of Europe.

Climate. Scandinavia has severe winters and cool, almost cold summers. The Kiolen Mountains, which extend from north to south, intercept the westerlies and deprive the eastern slopes of the moderating influence of these winds, hence the eastern part of the peninsula is colder and has less rain and snow than the Atlantic slope. During the winter months there is snow on the ground all

the time, and people go from place to place in sleighs, and enjoy exercise and sport on skis and toboggans.

Countries. Norway occupies the northwestern part of Scandinavia; Sweden, the southeastern part. Sweden is somewhat larger than Norway, and has more than twice the population. Both are limited monarchies.

People. The Scandinavians are strong, fearless, thrifty, industrious and intelligent people. One can distinguish in the civilized Scandinavians of to-day the traits of their ancestors, the Vikings, who invaded England, and voyaged to North America hundreds of years before Columbus. Norway and Sweden have excellent public schools, including institutions for instruction in the trades and in mechanic arts.



Lapps.

In the north of Scandinavia there are about twenty thousand Lapps, who subsist mainly on fish and the flesh of reindeer. They belong to the yellow race, and are a semi-barbarous, nomadic people.



A Norwegian farmhouse. It is built of stone and wood.

Questions

1. How much of Scotland is in the same latitude as southern Norway?
2. Which countries of Europe are farther west than Norway?
3. Which extends farther north, Sweden or Norway? Farther south? Farther east? Farther west?
4. How much of Norway is mountainous?
5. In what direction do the mountains extend?
6. What is the length, in miles, of the journey from Christiania to Hammerfest?

NORWAY

Surface. Norway consists mostly of old eroded mountains, the Kiolen, which are higher toward the south. The western slope is steep in most places, the mountains rising directly from the ocean.

Coast. The west coast attracts many tourists, who come to see the midnight sun, the glaciers, and the wonderful fiords, which are like deep cuts into the table-land of Norway. Some of them extend ninety miles into the interior, and the high cliffs act as great walls, keeping out the winds. The water in the fiords is, consequently, as placid as a lake, giving these chasms great value as secure havens. Many of the inhabitants live along the

fiords on the isolated skerries, or rocky isles, of which there are thousands along the coast. North Cape, on the most northerly skerry, rises abruptly from the sea to a height of over nine hundred feet.



North Cape, Norway.

Products and Pursuits. The wealth of Norway lies in its forests, fisheries and ships. The hard woods of southern Norway and western Sweden are exported to all parts of Europe. The streams are used to float logs from the forest and to furnish water power for the sawmills. No other part of Europe has so much water power as have Norway and Sweden, and although there is little manufacturing at present, that occupation is developing rapidly. About half of the Norwegians are fishermen and sailors. In number of vessels Norway's merchant marine ranks third among European countries. Besides timber, woodenware and fish, Norway exports ice for refrigerating purposes to the more southern countries of Europe.



The main street in Christiania, Norway. The Royal Palace is at the end of the street in the distance.

Cities. CHRISTIANIA, the capital of Norway, is situated at the head of a deep fiord, surrounded by forests. It has wide, well-paved streets and large buildings of stone. Though the harbor is icebound four months out of the twelve, Christiania is, nevertheless, the chief commercial city of Norway.

The harbor of BERGEN, on the western coast, somewhat north of Christiania, is never frozen. Bergen is the fishing center of Norway.

HAMMERFEST, the northernmost town of Europe, owes its existence to the influence of the Gulf Stream. The town is built along the coast. All the buildings are of wood. There are good schools and hotels and even a newspaper.

Questions

1. Which is wider from east to west, Norway or Sweden?
2. In which zone is Hammerfest? Bergen?
3. What is the boundary between these zones?



Hammerfest, Norway.

4. What is the latitude of Christiania? Bergen? Stockholm?

SWEDEN

Surface. The eastern slope of the Kiolen descends in three terraces to the shores of the Baltic Sea, and its northernmost arm, the Gulf of Bothnia. This part of Scandinavia is occupied by Sweden.



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Scene on a farm. Sweden.

Drainage. Glaciers on the higher mountains give rise to numerous rivers, which have rapid currents. Sweden has so many lakes and rivers that they are close together. The Swedes have joined some of them by short canals,



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A grain field in the hill section of Sweden.

thus forming continuous waterways of considerable length. The Gotha Canal, which connects Lake Wenner with the Baltic, was constructed in this way. The land slopes so much that locks are necessary to raise and lower the boats from one level of a canal to another.

Products and Pursuits. The heights of western Sweden are timbered, the middle terraces are rich in minerals, and the coastal plain is devoted to agriculture. Although the summer is short and even cool, the sun shines during most of the twenty-four hours, and hence there is warmth

enough to ripen hardy grains. Cattle and sheep feed on the grassy slopes of the Kiolen, east of the forest belt.

Iron is the most important mineral of Sweden, because Swedish iron is the best in the world. Sheffield uses it for the finest cutlery, and great quantities of it are used in Birmingham. The United States imports Swedish iron.

Sweden is in advance of Norway as a manufacturing country. Lumber, wood pulp, iron and steel, machinery, butter and matches are the chief products and the chief exports.



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The harbor, Stockholm, Sweden.

Cities. STOCKHOLM, the capital of Sweden, is built on both sides of the channel which connects the Baltic Sea with Malar Lake. It is at the entrance to the mining and agricultural regions, and hence has become the chief port of Sweden. Stockholm is built on islands, and is cut by so many canals that the city seems to ride on the waves.

The terraces of the king's palace lead to the water. Beautiful statues adorn the streets of Stockholm, evincing the artistic taste and culture of the people.

Commerce of Norway and Sweden. The commerce of Norway and Sweden is chiefly with England, the United States, Germany, and with each other. Scandinavian countries import coal, breadstuffs and wool, and export the products of their forests, mines and factories.

Questions

1. What part of the Pacific coast of North America is in the same latitude as Scandinavia?
2. In what respect do the coast lines of the two sections resemble each other?
3. What caused these coasts to have the features which characterize them?
4. What waters are east of Scandinavia?
5. By what straits are these waters connected with the North Sea?
6. Which has the better location as a seaport, Stockholm or Christiania?
7. Is Norway or Sweden the better adapted for farming? Why?

Exercises

Draw a map of the North and Baltic seas and their connecting waters.

Mark the names of the countries which border on these seas.

Locate ten ports on the coast.

Mark with their names the mouths of six rivers which flow into these seas.

SUMMARY AND COMPARISON

Although all but one of the other grand divisions are larger than Europe, there is none so far advanced in civilization. North America ranks next.

Civilization has spread from Europe to the other grand divisions. Europeans and their descendants are the leading people of every grand division, including North America. Steamship lines connect Europe with the rest of the world, and bring to European countries the products of other lands, chiefly raw materials, in exchange for her manufactures. The swiftest of these ocean liners carry to and from Europe the mail, by which even remote parts of the world are kept informed of European progress. Cables under the ocean serve the same purpose for those affairs of business and politics which must be transacted with great dispatch.

Questions

1. Which extends farther north, Europe or North America?
2. Which extends farther south?
3. In which part of North America are the principal highlands?
4. In which part of Europe are the principal highlands?
5. In what direction do the principal highlands of North America extend? The principal highlands of Europe?
6. In which part of North America is the longest river? In which section of Europe?
7. Compare the lengths of the two rivers. (See table, page xxiii.)
8. Which region of North America has a continental climate? Which part of Europe?

9. Which is greater, the distance from the United States to South America, across the Gulf of Mexico and Caribbean Sea, or the distance across the Mediterranean from Europe to Africa?

10. How far is it from Europe to North America? What is the quickest time made by ocean liners across the Atlantic?

In both North America and Europe population is densest along the Atlantic coasts. The settlement of North America by Europeans began in the east and has spread westward. In Europe the western part has developed most rapidly because that section is on the open sea, and because it includes the chief coal and iron regions, where manufacturing has developed.

North America has two advantages over Europe. It borders on the Pacific Ocean as well as on the Atlantic. This has brought about great settlements along the western coast of North America, for which Europe, bordering on the vast interior plains of northern Asia, has no counterpart. In Europe the people speak many languages; in North America but few. There are in North America settlers from all the countries of Europe, but they soon learn the language of their new home, English in the United States and Canada; Spanish in Mexico and Central America.

Exercises

(Refer to tables, page xi.)

Arrange the capitals of the Great Powers in order according to latitude.

Arrange them according to longitude.

Arrange the Great Powers according to their area.

Arrange them according to their population.

INDEX AND PRONOUNCING VOCABULARY

KEY.—VOWELS: à in lâte, å in făt, â in câre, ï in fär, á in lást, ą in sofâ, au in author; ē in mē, ě in mět, bĕrry, ę in veil, ě in těrm, ê in thêre; ī in fîne, ī in tîn, ī in police; ò in nôte, õ in nôt, ô in sôn, ô in fôr, ő in dô, ő in wôlf; ū in tûne, ũ in nût, ü in rûde (= ő), ü in fuull, ii = a sound midway between oo and ee, ua = wa, ue = we; ý in my, ý in hýmn. CONSONANTS: ç in çent, maçhine, e in ean, chasm; ǵ in ǵem, ǵ in ǵet; K = the guttural sound represented by ch in German words; n = ng, N = ng in its effect (nasal) on the preceding vowel, but is itself silent; ʂ = z; ʈh in thine. *Italic letters are silent.*

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APPENDIX



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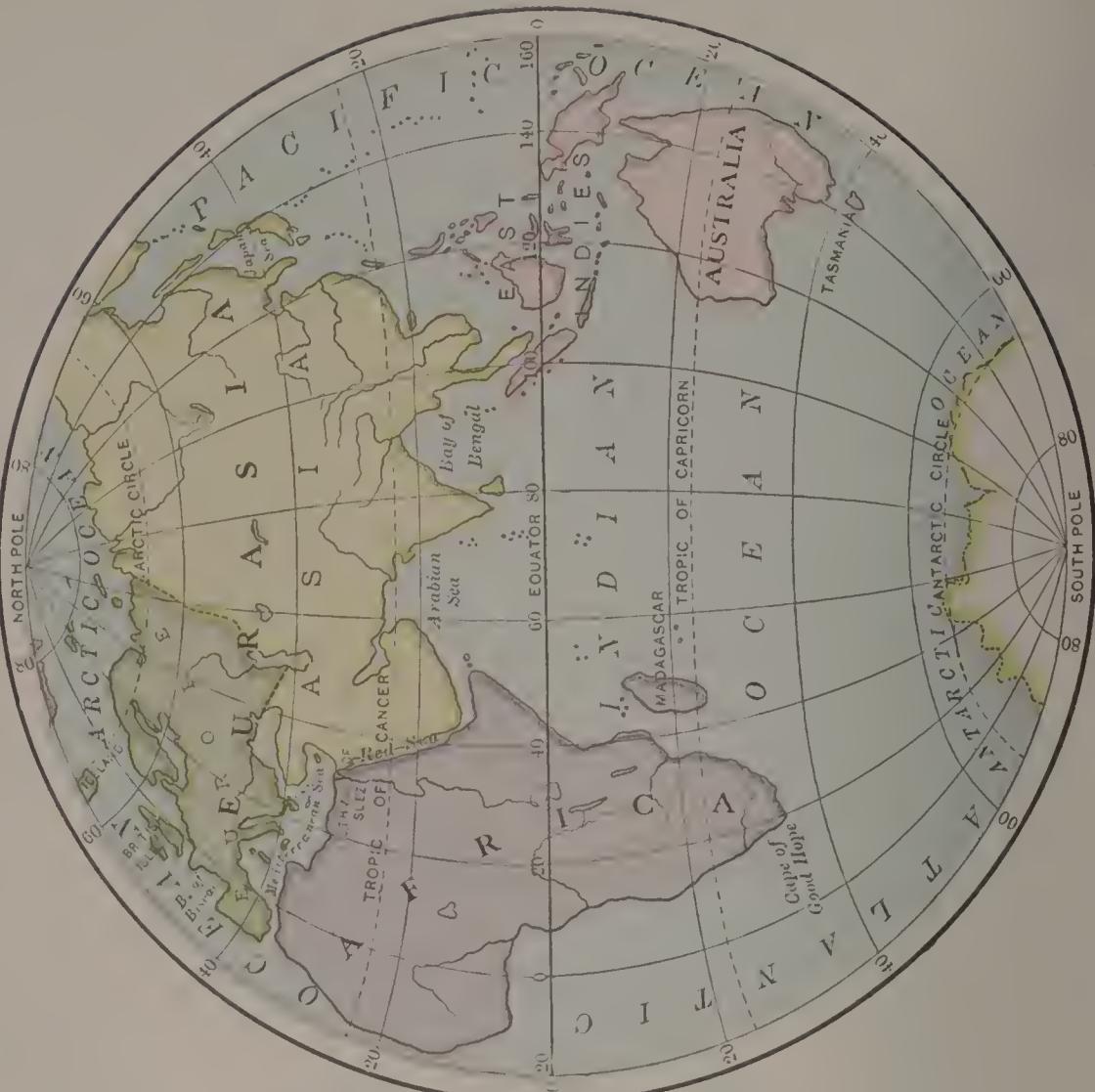
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TABLES

WESTERN HEMISPHERE



EASTERN HEMISPHERE



Area and Population of Grand Divisions and Countries

SUMMARY

Length of earth's axis (miles)	7,900
Length of equator (miles)	24,900
Earth's Surface (sq. mi.)	196,900,000
Pacific Ocean (sq. mi.)	71,000,000
Atlantic Ocean (sq. mi.)	34,000,000
Indian Ocean (sq. mi.)	28,000,000
Antarctic Ocean (sq. mi.)	2,700,000
Arctic Ocean (sq. mi.)	4,000,000
The Sea (sq. mi.)	139,700,000

Grand Divisions

	SQUARE MILES	POPULATION
North America	9,392,000	146,126,000
South America	6,856,000	63,850,000
Europe	3,894,000	450,098,000
Asia	17,043,000	888,992,000
Africa	11,514,000	136,272,000
Australia, etc.	3,457,000	8,758,000
Antarctic Cont.	5,000,000
The Land	57,156,000	1,694,096,000

NORTH AMERICA

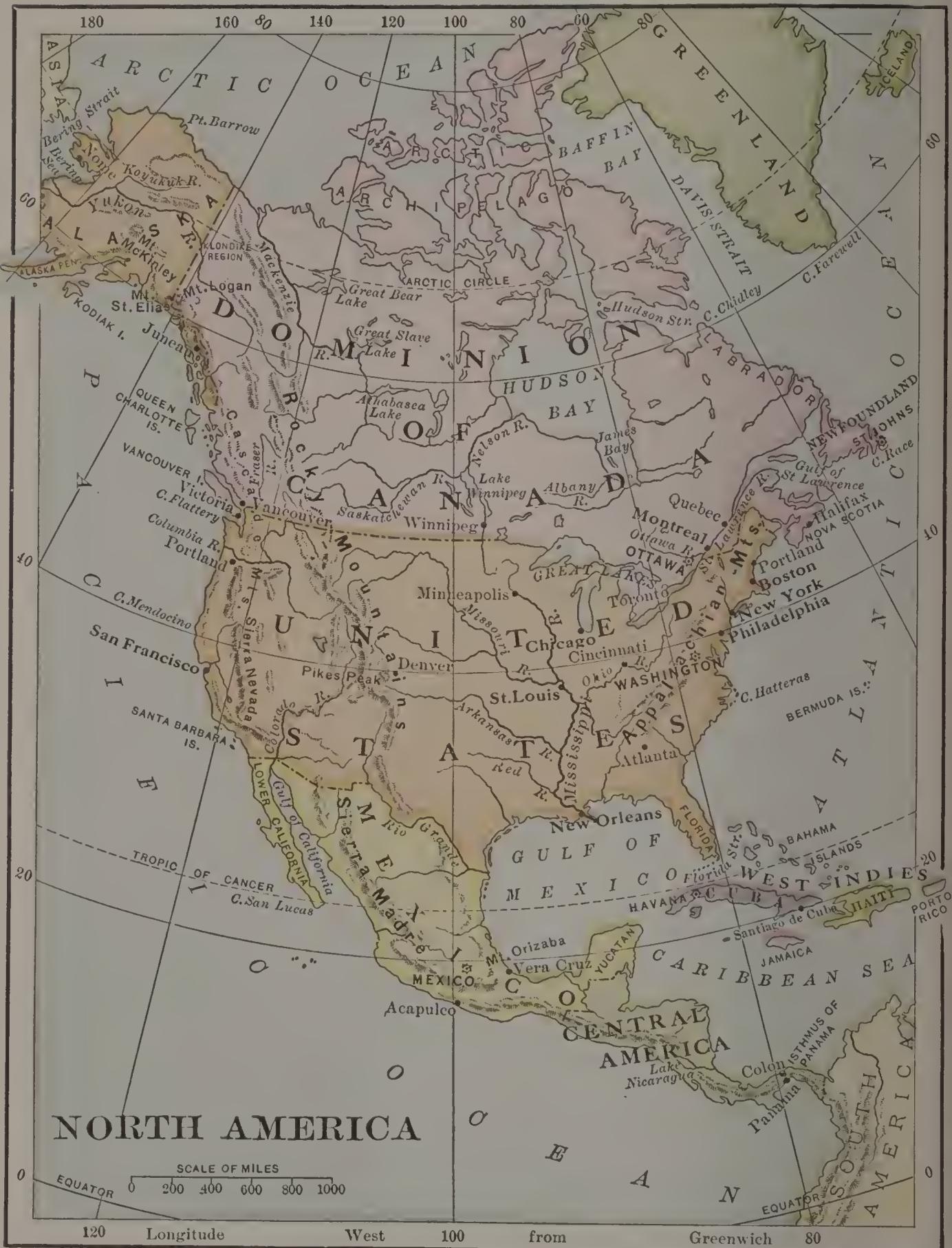
United States .	3,026,789	105,711,000
(States in Table, page xv)		
Alaska . . .	590,884	55,000
Dom. of Canada	3,729,665	8,788,000
Nova Scotia .	21,428	524,000
N. Brunswick	27,985	388,000
Prince Edw. I.	2,184	89,000
Quebec .	706,834	2,361,000
Ontaria .	407,262	2,934,000
Manitoba .	251,932	610,000
Saskatchewan	251,700	757,000
Alberta .	255,285	588,000
Brit. Columbia	355,855	525,000
Territories .	1,449,300	12,000
Part Gt. Lakes	30,540
Newf'dland etc.	49,680	268,000
St. Pierre, etc. .	93	5,000
Greenland . .	838,000	14,000
Mexico . . .	767,300	15,503,000
Central America	206,753	5,813,000
Guatemala .	43,640	2,100,000
Brit. Honduras	8,600	45,000
Honduras .	44,276	637,000
Salvador .	8,170	1,501,000
Nicaragua .	49,550	638,000
Costa Rica .	18,690	468,000
Panama . .	33,300	401,000
Canal Zone .	527	23,000
West Indies . .	91,400	9,947,000
Cuba . . .	44,000	2,889,000
Haiti, Rep. of	11,070	2,500,000
Dominican Rep.	18,750	897,000
Jamaica . .	4,840	858,000
Porto Rico .	3,435	1,300,000
Bahama Is. .	4,400	53,000
Lesser Antilles	4,905	1,450,000
Bermuda Is. .	19	22,000

SOUTH AMERICA

	SQUARE MILES	POPULATION
Brazil	3,300,000	30,645,000
Argentina . . .	1,084,000	8,699,000
Paraguay . . .	100,000	1,050,000
Uruguay . . .	69,000	1,495,000
Chile	293,000	3,755,000
Bolivia	440,000	2,890,000
Peru	440,000	4,586,000
Ecuador . . .	118,000	2,000,000
Colombia . .	466,000	5,855,000
Venezuela . .	364,000	2,412,000
Guiana, British	95,000	298,000
Guiana, Dutch.	50,000	113,000
Guiana, French	30,500	49,000
Falkland Is., etc.	6,570	3,000

EUROPE

United Kingdom	94,350	44,168,000
England	50,850	35,679,000
Wales . . .	7,473	2,207,000
Scotland . .	30,405	4,882,000
No. Ireland, etc.	5,622	1,400,000
Irish Free Stat.	27,040	3,140,000
Germany . . .	179,500	50,857,000
Belgium . . .	11,760	7,684,000
Netherlands . .	12,772	6,841,000
Denmark, etc. .	17,125	3,310,000
Iceland . . .	39,770	95,000
Norway . . .	124,710	2,646,000
Sweden . . .	172,928	5,904,000
Poland . . .	149,000	27,442,000
Danzig	600	365,000
Lithuania . .	25,500	2,300,000
Latvia	24,000	1,503,000
Estonia . . .	18,500	1,110,000
Luxemburg . .	999	264,000
Sarre Basin . .	750	658,000
Andorra . . .	175	5,000
France, etc. .	212,830	39,233,000
Spain	192,000	20,784,000
Gibraltar . . .	2	25,000
Portugal . . .	34,264	5,546,000
Azores	922	243,000
Switzerland . .	15,956	3,880,000
Italy, etc. . .	123,024	40,082,000
Fiume	10	50,000
Malta, etc. . .	124	225,000
Liechtenstein .	61	11,000
Austria	30,700	6,131,000
Hungary	36,000	7,841,000
Czechoslovakia	54,700	13,596,000
Yugoslavia . .	95,000	12,017,000
Roumania . . .	116,000	17,393,000
Bulgaria . . .	40,000	4,910,000
Albania . . .	11,000	832,000
Greece	42,000	4,932,000
Turkey in Eur.	10,000	1,800,000
Russia in Eur. .	1,816,500	99,908,000
Finland . . .	130,000	3,367,000
Arctic islands .	33,500



Area and Population of Grand Divisions and Countries (*continued*)

ASIA

SQUARE MILES POPULATION

Turkey	295,000	10,000,000
Syria	80,000	3,000,000
Iraq	140,000	2,850,000
Palestine . . .	9,000	757,000
Cyprus	3,580	311,000
Sinai (Egypt) .	22,800	26,000
Hedjaz	140,000	600,000
Aden, etc. . . .	15,870	177,000
Oman	75,000	500,000
Other Arabia . .	906,500	2,000,000
Persia	635,000	9,500,000
Afghanistan . .	240,900	6,380,000
Portug. India . .	1,400	548,000
Indian Empire . .	1,856,500	319,075,000
India proper . .	1,446,200	305,069,000
Burma	268,700	13,206,000
Baluchistan . .	141,600	800,000
Nepal	54,000	5,600,000
Bhutan	18,600	250,000
Ceylon, etc. . .	25,500	4,568,000
Straits Settl's, etc.	35,600	2,377,000
Siam	245,000	8,266,000
Fr. Ind.-Chin., etc.	256,500	17,269,000
East Indies . . .	788,000	60,694,000
Philippine Is..	115,000	10,351,000
Java	51,000	35,017,000
Sumatra, etc..	185,000	6,295,000
Borneo	290,000	2,459,000
Other islands. .	147,000	6,572,000
China, etc. . . .	4,300,000	320,880,000
China proper. .	1,497,000	302,340,000
Tibet	814,000	2,000,000
Sinkiang. . . .	550,000	2,000,000
Mongolia	1,076,000	1,800,000
Manchuria. . . .	363,000	12,740,000
Hongkong	400	625,000
Weihaiwei	280	147,000
Macao	4	75,000
Japanese Empire .	261,300	77,606,000
Japan	147,750	55,961,000
S. Sakhalin. . .	14,700	106,000
Taiwan, etc. . .	13,400	3,654,000
Dairen, etc. . .	1,200	601,000
Chosen	84,250	17,284,000
Russia in Asia . .	6,721,500	41,037,000
Siberia	4,162,000	9,349,000
Far Eastern Rep. .	645,000	1,812,000
Turkestan	570,000	7,202,000
Kirghiz	780,000	4,546,000
Lake Aral and Caspian Sea. . . .	195,600
Khiva	23,200	519,000
Bokhara. . . .	79,200	3,000,000
Armenia. . . .	15,000	1,214,000
Georgia	26,000	2,372,000
Azerbaijan	34,000	2,097,000
Russia proper, etc.	91,500	2,800,000
Arctic Islands . .	14,900

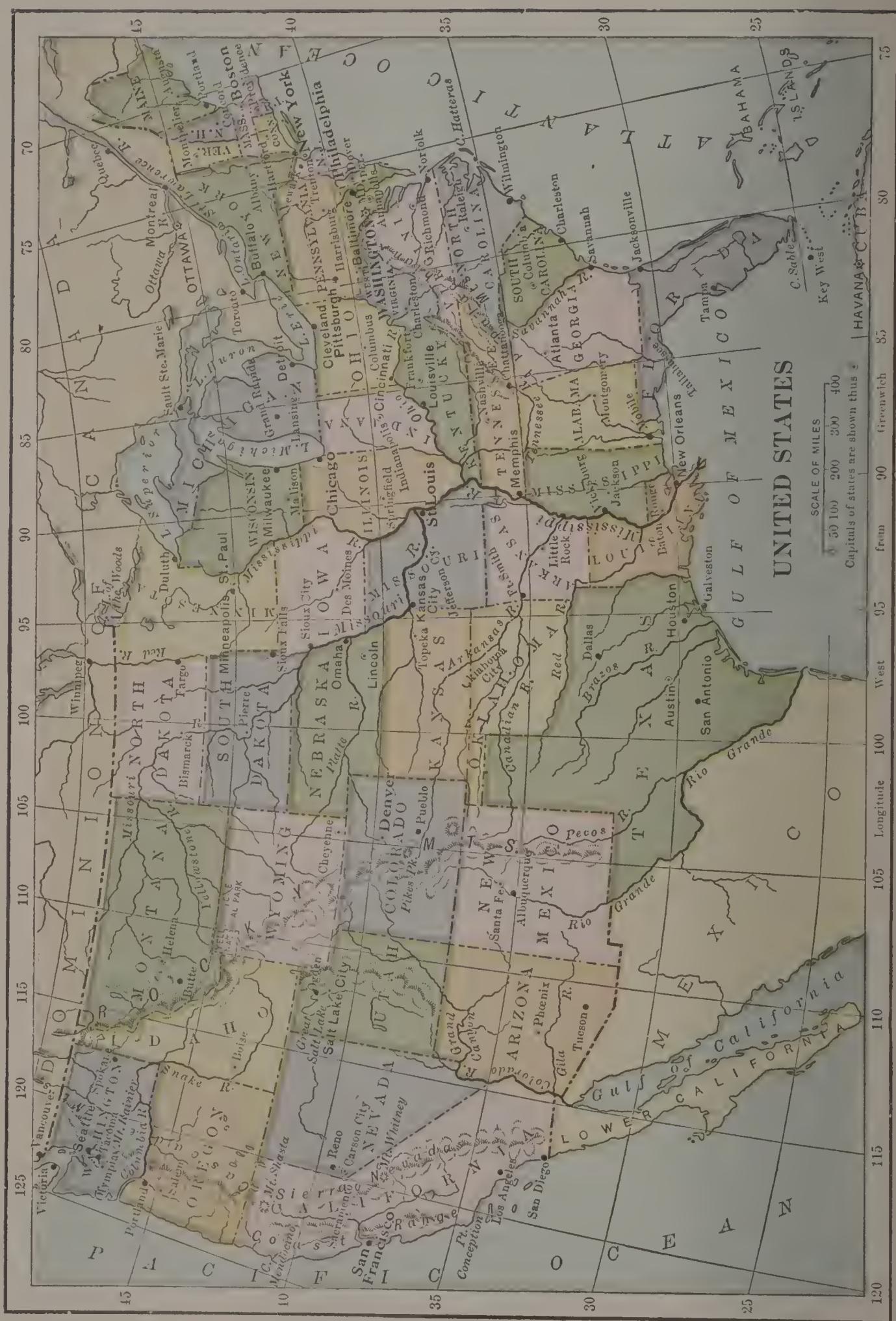
AFRICA

SQUARE MILES POPULATION

Egypt	Incl. parts of Sahara	400,000	13,387,000
Libia		542,000	525,000
Tunis		64,600	2,094,000
Algeria		343,600	5,801,000
Morocco		154,570	5,000,000
Sp. Morocco . .		21,200	600,000
Tangier (Int.) .		230	60,000
Sahara, part of.		1,944,000	695,000
Rio de Oro, etc.		82,100	224,000
Fr. West Africa		704,000	12,284,000
Gambia		3,700	248,000
Port. Guinea . .		13,100	289,000
Sierra Leone . .		26,900	1,403,000
Liberia		36,800	1,500,000
Gold Coast, etc.		88,800	2,430,000
Nigeria. . . .		394,000	17,300,000
Anglo-Eg. Sud.		1,014,400	3,400,000
Abyssinia. . . .		312,000	8,000,000
Eritrea		42,500	450,000
Fr. Somali . . .		6,000	208,000
Brit. Somali. . .		59,800	300,000
Ital. Somali . . .		190,000	700,000
Uganda Prot. . .		111,000	3,072,000
Kenya		247,000	2,630,000
Zanzibar		1,000	197,000
Tanganyika Ter.		384,200	4,000,000
Belgian Congo.		947,200	15,400,000
Fr. Equ'tor'l Af.		840,600	11,500,000
Angola, etc. . .		490,800	4,120,000
Mozambique . . .		295,800	3,120,000
Union of S. Af..		792,340	6,926,000
C. of Gd. Hope		277,000	2,781,000
Natal		34,710	1,194,000
Or. Free State		48,340	628,000
Transvaal . . .		114,290	2,086,000
S. W. Africa . .		318,000	237,000
Rhodesia		408,500	1,735,000
Other Br. S. Af.		313,900	1,989,000
Madagascar . . .		228,600	3,545,000
Other islands . .		8,730	1,800,000

AUSTRALIA, ETC.

Com. of Austr.	2,972,866	5,437,000
Victoria	87,884	1,532,000
New S. Wales	310,660	2,100,000
Queensland . .	668,497	758,000
South Austr. . .	380,070	495,000
Western Austr.	975,920	332,000
Tasmania	26,215	214,000
Northern Ter.	523,620	4,000
New Zealand . .	104,663	1,221,000
New Guinea, etc.	329,190	1,183,000
Solomon Is. . .	16,950	200,000
New Caledonia	7,650	51,000
New Hebrides.	5,100	60,000
Fiji Islands . . .	8,050	140,000
Samoa Islands.	1,076	45,000
Hawaiian Is. . .	6,449	256,000
Other Pacific Is.	5,385	160,000



XI-V

The United States

State	Area in Sq. Miles	Pop. 1920	Capital
Alabama . . .	51,998	2,348,174	Montgomery
Arizona . . .	113,956	334,162	Phoenix
Arkansas . . .	53,335	1,752,204	Little Rock
California . . .	158,297	3,426,861	Sacramento
Colorado . . .	103,948	939,629	Denver
Connecticut . . .	4,965	1,380,631	Hartford
Delaware . . .	2,370	223,003	Dover
Dist. of Columbia	70	437,571	
Florida . . .	58,666	968,470	Tallahassee
Georgia . . .	59,265	2,895,832	Atlanta
Idaho . . .	83,888	431,866	Boise
Illinois . . .	56,665	6,485,280	Springfield
Indiana . . .	36,354	2,930,390	Indianapolis
Iowa . . .	56,147	2,404,021	Des Moines
Kansas . . .	82,158	1,769,257	Topeka
Kentucky . . .	40,598	2,416,630	Frankfort
Louisiana . . .	48,506	1,798,509	Baton Rouge
Maine . . .	33,040	768,014	Augusta
Maryland . . .	12,327	1,449,661	Annapolis
Massachusetts . . .	8,266	3,852,356	Boston
Michigan . . .	57,980	3,668,412	Lansing
Minnesota . . .	84,682	2,387,125	St. Paul
Mississippi . . .	46,865	1,790,618	Jackson
Missouri . . .	69,420	3,404,055	Jefferson City
Montana . . .	146,997	548,889	Helena
Nebraska . . .	77,520	1,296,372	Lincoln
Nevada . . .	110,690	77,407	Carson City
New Hampshire . . .	9,341	443,083	Concord
New Jersey . . .	8,224	3,155,900	Trenton
New Mexico . . .	122,634	360,350	Santa Fe
New York . . .	49,204	10,385,227	Albany
North Carolina . . .	52,426	2,559,123	Raleigh
North Dakota . . .	70,837	646,872	Bismarck
Ohio . . .	41,040	5,759,394	Columbus
Oklahoma . . .	70,057	2,028,283	Oklahoma City
Oregon . . .	96,699	783,389	Salem
Pennsylvania . . .	45,126	8,720,017	Harrisburg
Rhode Island . . .	1,248	604,397	Providence
South Carolina . . .	30,989	1,683,724	Columbia
South Dakota . . .	77,615	636,547	Pierre
Tennessee . . .	42,022	2,337,885	Nashville
Texas . . .	265,896	4,663,228	Austin
Utah . . .	84,990	449,396	Salt Lake City
Vermont . . .	9,564	352,428	Montpelier
Virginia . . .	42,627	2,309,187	Richmond
Washington . . .	69,127	1,356,621	Olympia
West Virginia . . .	24,170	1,463,701	Charleston
Wisconsin . . .	56,066	2,632,067	Madison
Wyoming . . .	97,914	194,402	Cheyenne
Part of Gt. Lakes	61,730		

Main Body 3,088,519 105,710,620

OUTLYING TERRITORY, ETC.

Alaska ('10) . . .	590,884	55,036	Juneau
Guam. . . .	210	13,275	Agaña
Hawaii . . .	6,449	255,912	Honolulu
Philippines ('18)	115,026	10,350,640	Manila
Porto Rico . . .	3,435	1,299,809	San Juan
Pan. Canal Zone	527	22,858	
Samoan Is., etc.	77	8,056	
Virgin Is., of the U. S. ('17) . . .	132	26,051	
Soldiers and Sailors stationed abroad .		117,238	

Total Outlying 716,740 12,148,875

Grand Total . 3,805,259 117,859,495

Largest Cities of the United States

	Population, 1920
New York, N.Y.	5,620,048
Chicago, Ill.	2,701,705
Philadelphia, Pa.	1,823,779
Detroit, Mich.	993,678
Cleveland, Ohio.	796,841
St. Louis, Mo.	772,897
Boston, Mass.	748,060
Baltimore, Md.	733,826
Pittsburgh, Pa.	588,343
Los Angeles, Cal.	576,673
Buffalo, N. Y.	506,775
San Francisco, Cal.	506,676
Milwaukee, Wis.	457,147
Washington, D.C.	437,571
Newark, N. J.	414,524
Cincinnati, Ohio.	401,247
New Orleans, La.	387,219
Minneapolis, Minn.	380,582
Kansas City, Mo.	324,410
Seattle, Wash.	315,312
Indianapolis, Ind.	314,194
Jersey City, N.J.	298,103
Rochester, N. Y.	295,750
Portland, Ore.	258,288
Denver, Colo.	256,491
Toledo, Ohio.	243,164
Providence, R. I.	237,595
Columbus, Ohio.	237,031
Louisville, Ky.	234,891
St. Paul, Minn.	234,698
Oakland, Cal.	216,261
Akron, Ohio.	208,435
Atlanta, Ga.	200,616
Omaha, Nebr.	191,601
Worcester, Mass.	179,754
Birmingham, Ala.	178,806
Syracuse, N.Y.	171,717
Richmond, Va.	171,667
New Haven, Conn.	162,537
Memphis, Tenn.	162,351
San Antonio, Tex.	161,379
Dallas, Tex.	158,976
Dayton, Ohio.	152,559
Bridgeport, Conn.	143,555
Houston, Tex.	138,276
Hartford, Conn.	138,036
Scranton, Pa.	137,783
Grand Rapids, Mich.	137,634
Paterson, N. J.	135,875
Youngstown, Ohio	132,358
Springfield, Mass.	129,614
Des Moines, Iowa	126,468
New Bedford, Mass.	121,217
Fall River, Mass.	120,485
Trenton, N. J.	119,289
Nashville, Tenn.	118,342
Salt Lake City, Utah	118,110
Camden, N. J.	116,309
Norfolk, Va.	115,777
Albany, N. Y.	113,344
Lowell, Mass.	112,759
Wilmington, Del.	110,168
Cambridge, Mass.	109,694
Reading, Pa.	107,784
Fort Worth, Tex.	106,482
Spokane, Wash.	104,437
Kansas City, Kan.	101,177
Yonkers, N. Y.	100,176



Population of Cities in North America and South America

NORTH AMERICA

CANADA (1921)

Montreal	619,000
Toronto	522,000
Winnipeg	179,000
Vancouver	117,000
Hamilton	114,000
Ottawa	108,000
Quebec	95,000
Calgary	63,000
Edmonton	59,000
Halifax	58,000
London	54,000
St. John	47,000
Victoria	39,000
Regina	34,000

NEWFOUNDLAND (1921)

St. Johns	37,000
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CENTRAL AMERICA

BRITISH HONDURAS (1921)	
Belize	13,000

COSTA RICA (1920)

San Jose	39,000
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GUATEMALA (1921)

Guatemala	90,000
Quezaltenango	35,000
Coban	31,000

HONDURAS (1920)

Tegucigalpa	39,000
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NICARAGUA (1920)

Leon	38,000
Managua	28,000
Granada	17,000

PANAMA (1920)

Panama	67,000
Colon	31,000

SALVADOR (1920)

San Salvador	80,000
Santa Ana	70,000

MEXICO (1921)

Mexico ('19)	1,080,000
Guadalajara	119,000
Puebla	96,000
Monterey	74,000
San Luis Potosi	68,000

Merida	62,000
Leon	58,000
Vera Cruz	49,000
Aguas Calientes	45,000
Morelia	40,000
Pachuca	39,000
Saltillo	35,000
Durango	32,000

UNITED STATES

(See Table, page xv.)

WEST INDIES

Havana, Cuba	364,000
Camaguey, Cuba	98,000
Cienfuegos, Cuba	95,000
Santiago de Cuba, Cuba	70,000
Port au Prince, Haiti	120,000
Santo Domingo, Dom. Rep.	45,000
Kingston, Jamaica	62,000
San Juan, Porto Rico	71,000
Ponce, Porto Rico	42,000
Fort de France, Martinique	26,000
Bridgetown, Barbados	13,000
St. Thomas, Virgin Islands	8,000

SOUTH AMERICA

ARGENTINA (1922)	
Buenos Aires	1,720,000
Rosario	265,000
La Plata	151,000
Cordoba	135,000
Tucuman	91,000
Santa Fe	59,000
Mendoza	59,000
Bahia Blanca	44,000

BRAZIL (1920)

Rio de Janeiro	1,158,000
Sao Paulo	579,000
Bahia	283,000
Pernambuco (Recife)	239,000
Para (Belem)	236,000
Porto Alegre	179,000
Niteroy	86,000
Manaos	76,000

BOLIVIA (1918)

La Paz	107,000
Cochabamba	31,000
Potosi	30,000
Sucre	30,000
Santa Cruz	26,000

CHILE (1920)

Santiago	507,000
Valparaiso	182,000
Concepcion	66,000
Antofagasta	51,000
Iquique	37,000
Talca	36,000
Chillan	30,000

COLOMBIA (1918)

Bogota	144,000
Medellin	79,000
Barranquilla	65,000
Cartagena	51,000
Cali	45,000
Manizales	43,000
Cucuta	29,000
Bucaramanga	25,000

ECUADOR (1919)

Guayaquil	100,000
Quito	81,000

GUIANA

Georgetown, British Guiana (1911)	53,000
Paramaribo, Dutch Guiana (1920)	51,000
Cayenne, French Guiana (1918)	10,000

PERU (1919)

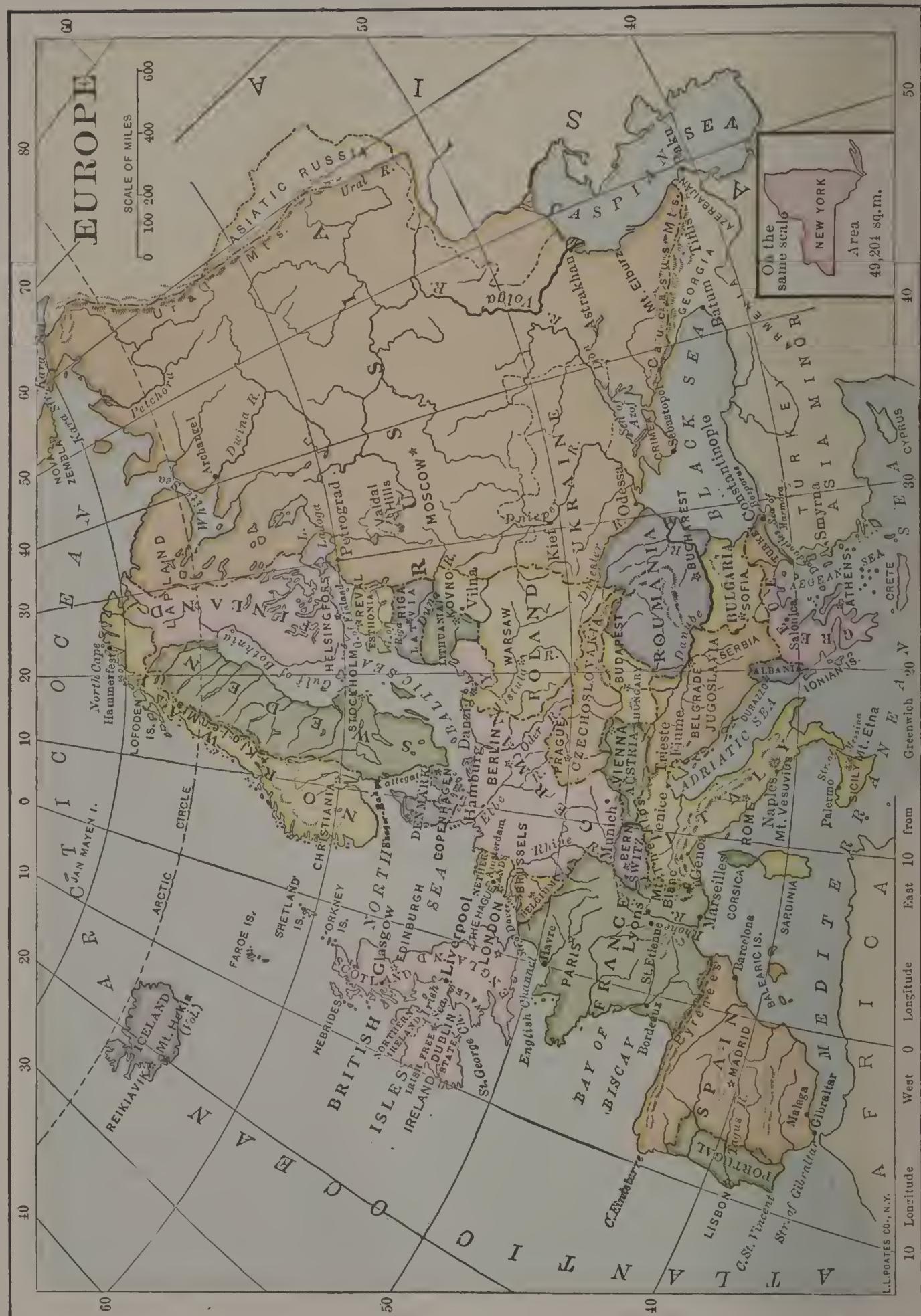
Lima	175,000
Callao	53,000
Arequipa	35,000
Ayacucho	14,000
Iquitos	12,000

URUGUAY (1922)

Montevideo	351,000
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VENEZUELA (1920)

Caracas	92,000
Maracaibo	47,000
Valencia	29,000



Population of Cities in Europe

ALBANIA (1914)	GERMANY (continued)	ROUMANIA (1917)
Scutari . . . 32,000	Dusseldorf . . . 407,000	Bucharest . . . 309,000
AUSTRIA (1920)	Nuremberg . . . 352,000	RUSSIA (1920)
Vienna . . . 1,842,000	Charlottenburg . . . 322,000	Moscow . . . 1,050,000
Gratz . . . 157,000	Hanover . . . 310,000	Petrograd
Linz . . . 94,000	Stuttgart . . . 309,000	(estimated) . . . 706,000
Innsbruck . . . 56,000	Chemnitz . . . 303,000	Odessa . . . 435,000
BELGIUM (1921)	Dortmund . . . 295,000	Kief . . . 366,000
Brussels . . . 775,000	Magdeburg . . . 285,000	Kharkof . . . 284,000
Antwerp . . . 304,000	Konigsberg . . . 260,000	Saratof . . . 235,000
Liege . . . 165,000	Bremen . . . 257,000	Nizhni Novgorod . . . 112,000
BULGARIA (1920)	Duisburg . . . 244,000	
Sofia . . . 154,000	Stettin . . . 232,000	SPAIN (1920)
CZECHOSLOVAKIA (1921)	Kiel . . . 205,000	Madrid . . . 751,000
Prague . . . 676,000	GREECE (1920)	Barcelona . . . 710,000
Brun. . . . 221,000	Athens . . . 301,000	Valencia . . . 244,000
DANZIG (1921)	Salonica . . . 170,000	Seville . . . 206,000
Danzig . . . 195,000	Piraeus . . . 133,000	SWEDEN (1922)
DENMARK (1921)	HUNGARY (1921)	Stockholm . . . 422,000
Copenhagen . . . 561,000	Budapest . . . 1,184,000	Goteborg . . . 227,000
ESTHONIA (1922)	Szeged . . . 110,000	SWITZERLAND (1920)
Reval . . . 123,000	ITALY (1921)	Zurich . . . 207,000
FINLAND (1920)	Naples . . . 780,000	Basel . . . 136,000
Helsingfors . . . 198,000	Milan . . . 718,000	Geneva . . . 135,000
Fiume	Rome . . . 691,000	Bern . . . 105,000
Fiume . . . 50,000	Turin . . . 502,000	Lucerne . . . 44,000
FRANCE (1921)	Palermo . . . 400,000	TURKEY
Paris . . . 2,906,000	Genoa . . . 301,000	Constantinople . . . 1,000,000
Marseille . . . 586,000	Catania . . . 255,000	UNITED KINGDOM (1921)
Lyon . . . 562,000	Florence . . . 254,000	England
Bordeaux . . . 267,000	YUGOSLAVIA (1919)	London . . . 7,476,000
Lille . . . 201,000	Belgrade . . . 120,000	Birmingham . . . 919,000
Nantes . . . 184,000	LATVIA (1920)	Liverpool . . . 803,000
Toulouse . . . 175,000	Riga . . . 185,000	Manchester . . . 731,000
St. Etienne . . . 168,000	Vilna . . . 215,000	Sheffield . . . 491,000
Strasbourg . . . 167,000	LUXEMBURG (1921)	Leeds . . . 458,000
Havre . . . 163,000	Luxemburg . . . 46,000	Bristol . . . 377,000
Nice . . . 156,000	NETHERLANDS (1920)	West Ham . . . 301,000
Rouen . . . 124,000	Amsterdam . . . 642,000	Hull . . . 287,000
Roubaix . . . 113,000	Rotterdam . . . 605,000	Bradford . . . 286,000
Nancy . . . 113,000	Hague . . . 360,000	Newcastle . . . 275,000
Toulon . . . 106,000	NORWAY (1920)	Nottingham . . . 263,000
Mulhouse . . . 99,000	Christiania . . . 258,000	Portsmouth . . . 247,000
Reims . . . 77,000	POLAND (1921)	Stoke-on-Trent . . . 240,000
GERMANY (1919)	Warsaw . . . 931,000	Leicester . . . 234,000
Berlin . . . 3,801,000	Lodz . . . 452,000	Salford . . . 234,000
Hamburg . . . 986,000	Lemberg . . . 219,000	Scotland (1921)
Cologne . . . 634,000	Krakow . . . 182,000	Glasgow . . . 1,034,000
Munich . . . 631,000	PORTUGAL (1920)	Edinburgh . . . 420,000
Leipzig . . . 604,000	Lisbon . . . 490,000	Dundee . . . 185,000
Dresden . . . 529,000	Oporto . . . 204,000	Aberdeen . . . 159,000
Breslau . . . 528,000		Ireland
Essen . . . 439,000		Dublin . . . 399,000
Frankfurt-am-		Belfast . . . 393,000
Main . . . 433,000		Wales
		Cardiff . . . 200,000



Population of Cities in Asia, Africa, and Australia

ASIA

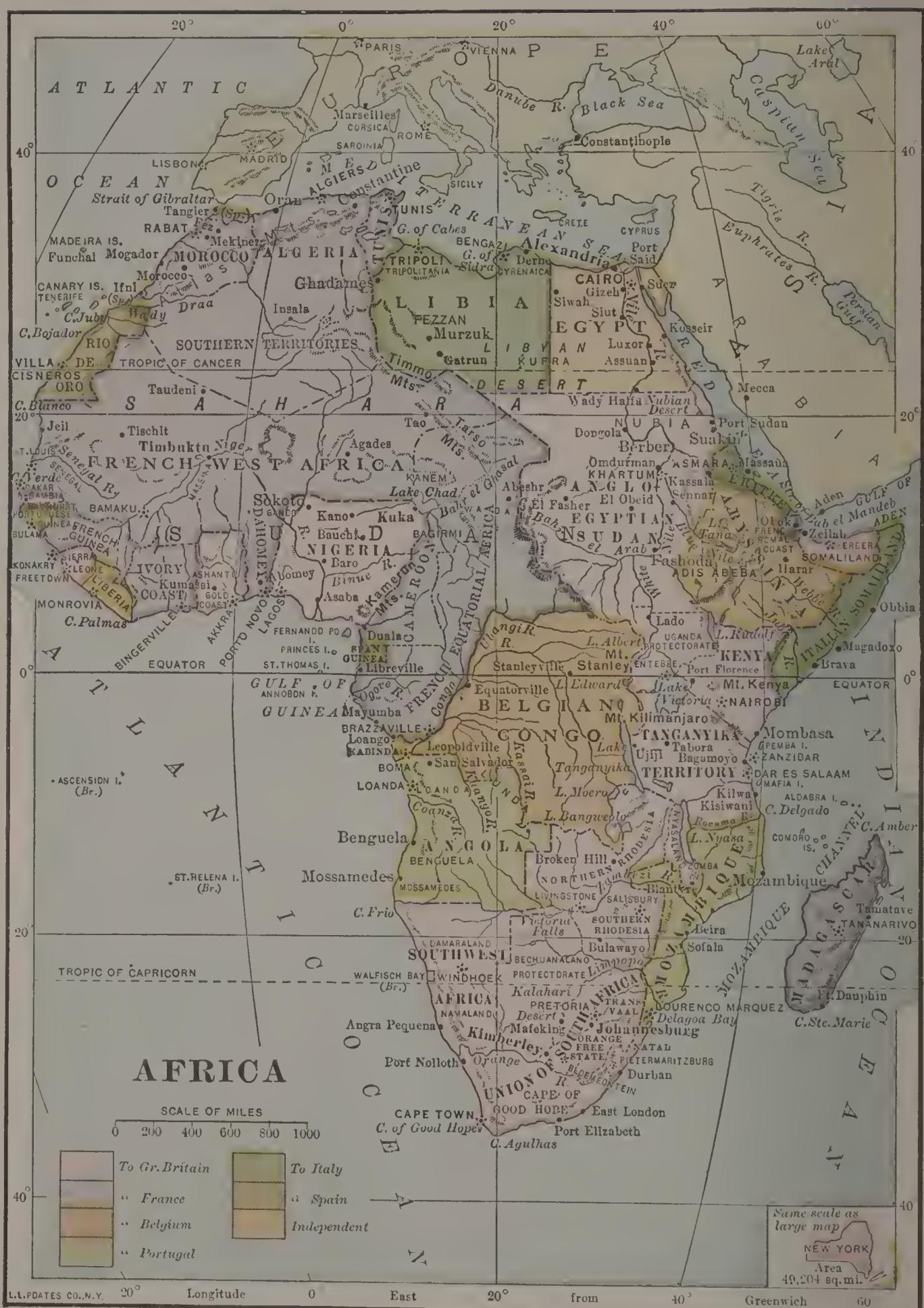
AFGHANISTAN	
Kabul . . .	150,000
Kandahar . .	31,000
Herat . . .	20,000
ARABIA	
Mekka, Hedjaz	70,000
Aden, Aden . .	55,000
Jidda, Hedjaz .	20,000
Maskat, Oman.	20,000
CHINA (PROPER), (1921)	
Shanghai . . .	1,500,000
Hankow . . .	1,468,000
Singan . . .	1,000,000
Peking . . .	924,000
Canton. . .	900,000
Hangchow . .	892,000
Tientsin . . .	800,000
Ningpo. . .	628,000
Foochow . . .	624,000
Changsha . .	536,000
Soochow . . .	500,000
MANCHURIA	
Mukden . . .	158,000
MONGOLIA	
Urga	38,000
TIBET	
Lassa	20,000
CHINESE TURKESTAN (SINKIANG)	
Kashgar . . .	60,000
Yarkand . . .	60,000
FRENCH INDO-CHINA ('21)	
Cholon, Cochinchina . . .	94,000
Saigon, Cochinchina . . .	82,000
Pnum-Penh, Cambodia .	75,000
Hanoi, Tonkin. .	74,000
Binh-Dinh, Anam . .	74,000
Hue, Anam . .	60,000
HONGKONG	
Victoria ('21) .	360,000
INDIA (1921)	
Calcutta . . .	1,328,000
Bombay . . .	1,175,000
Madras . . .	527,000
Haidarabad .	404,000
Rangoon . . .	342,000
Delhi	304,000
Lahore	282,000
Ahmedabad .	274,000
Lucknow . . .	240,000
Bangalore . . .	237,000

INDIA (continued)

Karachi . . .	217,000
Cawnpur . . .	216,000
Benares . . .	198,000
Agra	185,000
Mandalay . . .	149,000
JAPAN (1920)	
Tokyo	2,173,000
Osaka	1,252,000
Kobe	608,000
Kyoto	591,000
Nagoya	429,000
Yokohama . . .	422,000
Seoul	250,000
Nagasaki . . .	176,000
Pingyang . . .	72,000
IRAQ (1920)	
Mosul	350,000
Bagdad	250,000
PALESTINE (1919)	
Jerusalem . . .	64,000
Jaffa	47,000
PERSIA	
Teheran	220,000
Tabriz	200,000
Ispahan	80,000
Kerman	80,000
PHILIPPINES (1918)	
Manila	283,000
Iloilo. . . .	48,000
Cebu	46,000
RUSSIA IN ASIA	
Tiflis ('15) . .	347,000
Tashkent ('13). .	272,000
Baku ('20) . .	250,000
Omsk ('20) . .	144,000
Kokand ('11) .	118,000
Irkutsk ('20) .	104,000
Tomsk ('20) . .	90,000
Bokhara ('19) .	75,000
Vladivostok ('20)	61,000
SIAM (1920)	
Bangkok	630,000
STRAITS SETTLEMENTS	
Singapore ('19)	387,000
SYRIA	
Damascus . . .	250,000
Aleppo	250,000
Beirut	180,000
TURKEY	
Smyrna	375,000
Brusa	110,000
Erzerum	90,000
Sivas	65,000
Trebizond . . .	55,000
Kaisariye . . .	54,000

AFRICA

ABYSSINIA	
Adis Abeda . . .	40,000
ALGERIA (1921)	
Algiers	207,000
Oran	141,000
ANGLO-EGYPTIAN SUDAN	
Khartum ('12) .	23,000
EGYPT (1917)	
Cairo	791,000
Alexandria . . .	445,000
Port Said . . .	91,000
KENYA (1921)	
Mombasa. . . .	40,000
LIBERIA	
Monrovia. . . .	6,000
LIBIA (1911)	
Tripoli	73,000
Bengazi	35,000
MADAGASCAR (1921)	
Tananarivo . . .	63,000
MOROCCO (1921)	
Morocco	140,000
Fez	70,000
Tangier	50,000
Rabat	31,000
SIERRA LEONE (1921)	
Freetown	44,000
TUNIS (1921)	
Tunis	172,000
UNION OF SO. AFRICA ('21)	
Johannesburg . .	288,000
Cape Town . . .	207,000
Durban	146,000
Pretoria	94,000
Kimberley . . .	46,000
Bloemfontein .	39,000
ZANZIBAR	
Zanzibar	35,000
AUSTRALIA AND EAST INDIES	
AUSTRALIA (1921)	
Sydney. . . .	898,000
Melbourne . . .	784,000
Adelaide	255,000
Brisbane	210,000
Perth	155,000
Ballarat	39,000
NEW ZEALAND (1921)	
Auckland . . .	158,000
Wellington . . .	107,000
Christchurch .	106,000
Dunedin	72,000
DUTCH EAST INDIES	
Batavia, Java ('17)	235,000



General Tables

Distances, etc.

	Miles
Distance, Earth to Sun	93,000,000
Distance, Earth to Moon	240,000
Diameter of Earth, Polar	7,900
Diameter of Earth, Equatorial	7,926
Degree of Latitude, about	69
Circumference at the Equator	24,900

Heights of Mountains, Plateaus and Peaks

NORTH AMERICA

	Feet
Rocky Mts.	10,000
Sierra Nevada	9,000
Cascade Mts.	9,000
Sierra Madre	8,500
Coast Ranges	3,000
Appalachian Mts.	2,500
Mexican Plateau	7,500
Mt. McKinley, Alaska	20,464
Mt. Logan, Canada	19,539
Mt. Orizaba, Mexico	18,314
Mt. St. Elias, Alaska	18,010
Mt. Popocatepetl, Mexico	17,784
Mt. Whitney, Cal., Sierra Nevada	14,502
Mt. Shasta, Cal., Cascade Mts.	14,380
Pikes Peak, Col., Rocky Mts.	14,111
Mt. Mitchell, N. C., Appalachians.	6,711

SOUTH AMERICA

Andes Mts.	13,000
Bolivian Plateau	12,500
Mt. Aconcagua, Argentina	23,860
Mt. Sahama, Bolivia	22,350
Mt. Sorata, Bolivia	21,286

Lengths of Great Rivers

NORTH AMERICA

	Miles
Missouri-	
Mississippi,	4,200
Missouri	2,900
Mississippi	2,600
St. Lawrence	2,100
Mackenzie	2,100
Arkansas	2,000
Yukon	2,000
Colorado	2,000
Nelson-	
Saskatchewan	1,900
Rio Grande	1,800
Columbia	1,300
Ohio	1,000
Fraser	750
SOUTH AMERICA	
Amazon	3,500
Parana-Plata	2,600
São Francisco	1,800
Orinoco	1,500
Magdalena	1,100

EUROPE

	Miles
Volga	2,300
Danube	1,800
Dnieper	1,300
Dwina	1,000
Don	1,000
Rhine	800

ASIA

Yangtze	3,100
Ob	3,000
Yenisei	3,000
Hwang	2,800
Lena	2,800
Amur	2,800
Mekong	2,600
Indus	2,000
Euphrates	2,000
Brahmaputra	1,800
Ganges	1,500
Irrawaddy	1,500

AFRICA

Nile	3,900
Niger	2,900
Congo	2,800
Zambezi	1,600
Orange	1,200

SOUTH AMERICA (continued)

Feet

Mt. Illimani, Bolivia	21,030
Mt. Chimborazo, Ecuador	20,517
Mt. Misti, Peru	20,320
Mt. Cotopaxi, Ecuador	19,613
Mt. Tolima, Colombia	18,300
Mt. Icutu, Venezuela	11,000
Mt. Itatiaia, Brazil	9,840

EUROPE

Alps Mts., Switzerland	8,500
Pyrenees Mts., Spain	8,000
Ural Mts., Russia	3,500
Kiolen, Norway	3,000
Mt. Blanc, France	15,780
Mt. Etna, Sicily	10,865
Mt. Hekla, Iceland	5,110
Mt. Vesuvius, Italy	4,260

ASIA

Himalaya Mts.	19,000
Karakoram Mts., Tibet	18,500
Tien Shan, Turkestan	18,000
Kuenlun, Tibet	18,000
Caucasus Mts.	10,000
Pamir Plateau	16,000
Tibet Plateau	15,000
Mt. Everest, Nepal	29,002
Mt. Elburz, Caucasus	18,493
Mt. Ararat, Armenia	17,325
Mt. Fujiyama, Japan	12,395

AFRICA

Atlas Mts., Morocco	9,000
Abyssinian Plateau	6,500
Mt. Kilimanjaro, East Africa	19,780
Mt. Kenya, East Africa	19,000
Mt. Stanley	16,800

Areas of Great Lakes

NORTH AMERICA

	Sq. Miles
Superior	31,000
Huron	24,000
Michigan	22,500
Great Bear	14,000
Erie	10,000
Winnipeg	9,000
Ontario	7,250
Nicaragua	3,000
Great Salt	2,300

SOUTH AMERICA

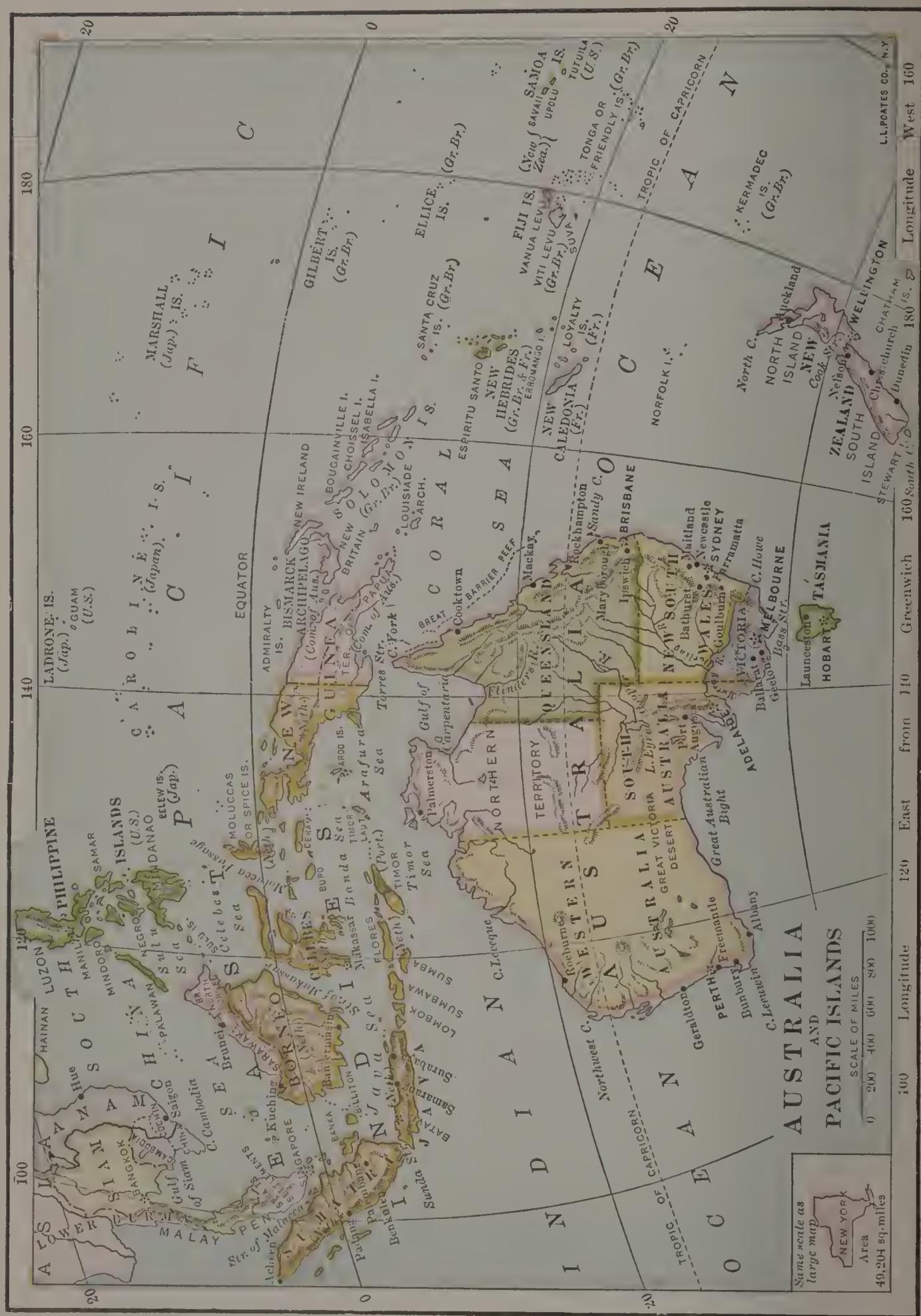
Titicaca	3,250
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EUROPE

Ladoga	7,000
Caspian	169,000
Aral	26,000
Baikal	13,000
Balkash	8,500
Dead Sea	350

AFRICA

Victoria	32,000
Nyasa	14,000
Tanganyika	14,000
Chad	10,000



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